

# EPHP 2010

National Conference on

## Bringing Evidence into Public Health Policy

Five years of the National Rural Health Mission



December 10 & 11, 2010

Bangalore



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Institute of Public Health, Bangalore, India  
Institute of Tropical Medicine, Antwerp, Belgium

EPHHP 2010

National Conference on  
Bringing Evidence into  
Public Health Policy

June 10-11, 2010, National Institutes of Health

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## Background EPHP 2010

The National Rural Health Mission (NRHM) is a landmark venture launched on the 12th of April, 2005 by the Government of India. Its aim is to provide accessible, affordable, accountable, effective and reliable health care facilities to rural areas through increased outlays, flexible financing, communitisation, horizontal integration of existing schemes, improved management through capacity building and innovative human resource management.

We have now crossed five years of the NRHM. There is an array of opinions on the scheme and myriad suggestions to improve delivery over the next two years – some of these opinions are conflicting and contradictory. Whereas policy makers usually rely on routine data and review missions to monitor the NRHM, these programmatic reviews seldom provide empirical evidence to guide action. Decision makers find researchers to be too academic and too slow in meeting practical economic, social and political needs.

Researchers, on the other hand, feel that they should be objective and 'distanced from' from decision makers and the community. Researchers have evidence that, however, comes out in the open only as publications in journals or as presentations in conferences. So, when the policy makers want this evidence, they don't know where to find it. The problem therefore lies in the minimal interaction of these two important groups.

As the National Rural Health Mission (NRHM) completes five years, the Institute of Public Health felt that it was a good idea to look back on what has been achieved till date. Ignoring the myriad exaggerated and subjective criticism it has, and still receives, there is a need to question if there is empirical evidence that the NRHM is actually making a difference?

The conference stands as an opportunity for researchers to present the results of their empirical studies on health systems on an international dais. By presenting these findings to policy makers and implementers at both, the central and state levels, there is a hope to influence the policy making process through evidence based research. For policy makers, it is a chance to get together, review the evidence and act accordingly. Through the conference, the researchers too get a chance to actively participate in the policy and program development process and distill crucial research questions in the future. Given the power of research, such a platform poses as an impetus, inspiring other researchers to take up health systems research and subsequently, with a union of research and action, strengthen the existing health system.





## Message from the Director, IPH

In the late 1800s, Mark Twain wrote, "There is only one India: .....a wonderland of fabulous wealth and fabulous poverty, of splendor and rags. The one sole country under the sun that is endowed with an imperishable interest for alien princes and peasants, for lettered and ignorant, wise and fool, rich and poor....." A 100 years later and we couldn't agree more.

India is a land of massive inequity. While urban women are treated to specialized and luxurious maternity clinics that promise to be "a home away from home"; rural women are dying in their real homes, unable to get to their nearest health centre, which isn't so near after all.

But there is a silver lining to this. A lot of reforms have taken place in the health sector. Reforms, that promises a great deal of change. Unfortunately, there is very little empirical evidence to back this change and that poses a major hurdle to effective evaluation. There is little or negligible evidence from the field about what is working and what isn't. And also, why it is working and why it isn't. And even if there is some evidence in the form of research or studies, they are too few and too far apart. And these few studies are not disseminated widely enough and/or to people that matter in bringing about a change.

So the situation we are confronted with is this: On one hand, you have researchers who have studies - crucial evidence from the field - that are highly academic and circulated within a very close milieu. On the other hand, you have decision makers/policy makers who are forced to make decisions in a vacuum, based on impressions or conventions.

And that's how the idea of EPHP was born - to bridge this gap between research and policy and give both of these,



very important, groups a chance to interact. The idea of the conference is to give them a common platform for effective dialogue so that researchers can share their findings with key decision makers and policy makers can in turn, evaluate the policies presently in practice. Not to mention, introduce and implement newer policies that are backed by evidence.

The National Rural Health Mission (NRHM) turns five this year and has earned itself a spot as the theme for EPHP 2010. However, it doesn't end here. The plan is to have EPHP as a recurrent event that will constantly aim to bring together policy makers, researchers and practitioners onto a common dais time and time again.

EPHP 2010 would not have been a reality without the support of the Institute of Tropical Medicine (ITM), Antwerp. We are grateful to ITM for their unconditional technical and financial support for this event. We are looking forward to two days of intense discussions and learning that will make India a better place for those who have "fabulous poverty".

**Dr. N. Devadasan**

*Director*

Institute of Public Health

Bangalore, India



## Message from ITM

One of the priorities in the activity portfolio of the (young) Institute of Public Health (IPH) in Bangalore is to be/ become a sort of observatory of the processes, outputs and outcomes of the formidable National Rural Health Mission (NRHM) programme that was launched by the Government of India (GOI) in 2005.

Being a privileged witness of IPH's development over the last few years, I can firmly confirm that IPH very much shares the values and objectives that underlie this NRHM programme. IPH has the ambition to be a constructive - nevertheless critical - observer of how this programme runs in the state of Karnataka and possibly also elsewhere.

The Institute of Tropical Medicine, Antwerp (ITM-A) is very happy to provide support to build capacity within IPH and thereby bring its modest contribution to enable IPH to play this role in an effective way.

In that respect, ITM-A is happy to co-organise the December 2010 National Conference on Bringing Evidence into Public Health Policy (EPHP). We believe it is a unique forum for researchers, practitioners and policy-makers to exchange and debate. This conference is a very laudable attempt to bridge the world of research, practice and policy-making so as to enhance the effectiveness, efficiency and equity of the various health care delivery interventions implemented in the frame of the NRHM. Eventually, this conference is to benefit the health of the people of India.

Research evidence is (should be) a crucial element in policy-making, even if it is by no means the only element feeding into this complex process. As we all know, if only intuitively, other dynamics also play a role: eventually, health policies will also be shaped by political priorities as established at the various levels of society, be it in India or elsewhere. And rightly so. Health is only one of the many priorities people have and, in a democratic



society, it is up to the representatives of the people to make choices and to balance attention and investments with due consideration for the many other problems people experience in their daily lives.

There is one particular aspect of the conference we find particularly important and we therefore wish to highlight it in this brief. That is the fact that experiences from the very field - i.e. there where the health care delivery takes place (or should take place) - are been given prominence in this conference. The health workers and researchers that operate at the grassroots level of the health system are given a floor to present their findings and the lessons they have learned. One of the challenges of the conference will be to try and lift "local" experiences up to a broader level and address the relevance and validity of the research findings for other settings in the district, the State and the country. Without intending to preempt some of the discussions we shall have during these two days, I believe that the need to contextualize the various research findings will be an important dimension of the conference. What works (or what does not work)

in a particular setting, is subject, amongst other things, to the context in which the interventions and programmes were established. So, due consideration for context description should get due attention throughout the conference.

We are confident at ITM-A that this conference will be successful, and perhaps even constitute a landmark in the effective implementation of NRHM policies. We are happy and proud to bring our small contribution to this great endeavour.

On behalf of ITM,

**Bart Criel**

Health Policy and Financing Unit,

Department of Public Health,

Institute Tropical Medicine, Antwerp, Belgium



# Program Schedule \*at the time of printing

## EPHP - 2010

Timings	Programme - Day 1 (10/12/2010)
8.30 am onwards	Registration
	Opening Ceremony
9.00 to 10.30 am	Inaugural address
	Keynote Speaker - Overview of the NRHM
	HEALTH SERVICE DELIVERY
10.30 to 11.00 am	Keynote Speaker - Status of Health services in India
	Quality of care for maternal health services - findings from a study in Karnataka
	The contribution of ASHAs towards PHC - a study from Bihar
11.00 to 1.00 pm	The performance of JSY - a study from West Bengal
	Integrated approach for improving neonatal and infant mortality - evidence from Bangladesh
	PPP in RNTCP - is it working? Evidence from Karnataka
1.00 to 2.00 pm	Lunch
	HUMAN RESOURCES FOR HEALTH
2.00 to 2.30 pm	Keynote speaker - Status of Human Resources in India
	Determinants of Performance of Government Doctors in 3 states
	Contracting in a clinical services - Do they work in Maharashtra?
2.30 to 4.30 pm	capacity building of Medical officers through distance education - the evidence
	Are 3 year BRMS doctors effective? Evidence from Chattisgarh
	Strengthening ASHA Support Mechanisms
4.30 to 5.00 pm	Tea
*12 min. for each presentation, followed by a plenary of 60 min. of facilitated discussion between policy makers and researchers	

Timings	Programme - Day 2 (11/12/2010)
	STEWARDSHIP AND GOVERNANCE
9.00 to 10.00 am	Keynote speaker - Status of policy making in our country
	The importance of monitoring - evidence from Bangladesh
	Functioning of RKS in West Bengal
10.00 to 12.30 pm	How effective is community based monitoring? - Evidence from Maharashtra
	Rights based approach to making the health system work - evidence from Karnataka
	Impact of functional VHSC on maternal health - evidence from Orissa
2.30 to 1.30 pm	Lunch
	HEALTH FINANCING
1.30 to 2.00 pm	Keynote speaker - Status of Health Financing in India
	Patterns of public health expenditure in India: pre and post NRHM
	District flow of funds in NRHM
2.00 to 4.00 pm	How effective is JSY - evidence from Rajasthan
	An evaluation of the RSBY scheme in Chattisgarh
	An evaluation of the Rajiv Gandhi Aarogyashree Scheme from Andhra Pradesh
4.00 to 4.30 pm	WAY FORWARD AND THE NEXT STEPS
4.30 to 5.00 pm	Tea
*12 min. for each presentation, followed by a plenary of 60 min. of facilitated discussion between policy makers and researchers	



## Acronyms

**ANM:** Auxiliary Nurse Midwife  
**APVVP:** Andhra Pradesh Vaidya Vidhan Parishad  
**ASHA:** Accredited Social Health Activist  
**AYUSH:** Ayurveda, Unani, Siddha and Homoeopathy  
**BMOH:** Block Medical Officers of Health  
**BPL:** Below Poverty Line  
**CBM:** Community Based Monitoring  
**CBO:** Community Based Organisation  
**CHC:** Community Health Centre  
**CPHC:** Comprehensive Primary Health Care  
**DHAP:** District Health Action Plans  
**DOTS:** Directly Observed Treatment Short Course  
**EAG:** Empowered Action Group  
**EmOC:** Emergency Obstetric Care  
**EMS:** Emergency Medical Services  
**EMT:** Emergency Medical Technicians  
**FGD:** Focus Group Discussion  
**GoI:** Government of India  
**HMIS:** Health Management Information System  
**ICDS:** Integrated Child Development Services  
**IMA:** Indian Medical Association  
**JSY:** Janani Suraksha Yojana  
**LBW:** Low Birth Weight  
**LHV:** Lady Health Visitor  
**MBBS:** Bachelor of Medicine, Bachelor of Surgery  
**IMNCH:** Integrated Maternal, Neonatal and Child Health  
**MoHFW:** Ministry of Health and Family Welfare  
**NDAP:** Non-Degree Allopathic Practitioners  
**NGO:** Non Governmental Organisation  
**NHSRC:** National Health Systems Resource Centre  
**NRHM:** National Rural Health Mission  
**PCR:** Polymerase Chain Reaction  
**PDS:** Public Distribution System  
**PG:** Post Graduate  
**PHC:** Primary Health Centre  
**PHC:** Primary Health Care



**PHN:** Primary Health Nurse  
**PIP:** Program Implementation Plan  
**PPP:** Public-Private Partnership  
**PRI:** Panchayati Raj Institutions  
**RCH:** Reproductive and Child Health  
**RKS:** Rogi Kalyan Samiti  
**RMA:** Rural Medical Assistant  
**RMP:** Registered Medical Practitioner  
**RNA:** Rapid Needs Assessment  
**RNTCP:** Revised National Tuberculosis Control Program  
**RSBY:** Rashtriya Swasthya Bima Yojana  
**RTI:** Right to Information  
**RTI:** Road Traffic Injuries  
**SBA:** Skilled Birth Attendant  
**SC:** Sub-Centre  
**SCNU:** Special Care Newborn Unit  
**SHG:** Self Help Group  
**TB:** Tuberculosis  
**UPHCP:** Urban Primary Health Care Project  
**VHND:** Village Health and Nutrition Days  
**VHSC:** Village Health and Sanitation Committee  
**WHO:** World Health Organisation



# **Health Services**





# Quality of care in obstetric services in rural South India – evidence from two studies in a ten-year-period

*Author(s): Asha Kilaru, Saraswathy Ganapathy, Baneen Karachiwala*

## Introduction:

To map out positive and negative changes in delivery and uptake of pregnancy-related services over a decade in a rural taluk of Ramnagar District, a comparison of data from two studies separated by about 10 years in the same area was undertaken. This comparison provides a picture of changes in health services and care-seeking pre-NRHM and post-NRHM launch and identifies important gaps in the adequacy, quality and safety of services currently being delivered to women during pregnancy, delivery and postpartum. While the study population is from rural South Karnataka, many of the issues that arise are common to rural populations across the country and region.

## Methodology:

Results of two studies in the same taluk with related objectives are compared to provide a picture of changes in health services and care-seeking pre-NRHM and post-NRHM launch. These studies explore aspects of the care provided as well as the way care is experienced by women and their families. While the study population is from rural South Karnataka, many of the issues that arise are common to rural populations across the country and region.

	Study 1 - 1996-98	Study 2 - 2007-2009
Study design and sample	Prospective research design, quantitative and qualitative methods used  11 villages randomly selected Recruited all pregnant women between 1996-98 (520 women). Followed to 3 months postpartum	Prospective research design, quantitative and qualitative methods used  39 villages across 13 PHCs randomly selected, 41 adjacent villages purposively selected to meet enrolment target Enrolment started in

		April 2007; data collection ended June 2009. All women who planned to deliver in study area and were in 3rd trimester enrolled (642). 608 women completed the study
	Five questionnaires (2 antenatal, one immediately post-delivery and one about three months post-partum).	One antenatal questionnaire in the 3rd trimester, one postpartum about one month after delivery
Geographical coverage	11 villages of Kanakapura taluk, population of approximately 25,000.	80 villages of Kanakapura taluk, Population of approximately 150,000.

### Findings:

The first study documented 30% of women switching from planned place of delivery. This level remained similar in the second study, with 33% of women switching to a different delivery location for reasons other than direct referral, indicating little change in birth preparedness and emergency planning. Overall, institutional deliveries rose from 35% to over 80%. Skilled birth attendance at home delivery by ANMs went down from 34% to 17% in spite of the lower incidence of home births. The timing and number of antenatal visits has improved, as has the content of antenatal care across the two time periods (BP check, IFA), but still shows many gaps (urine test, advice problem signs and when to come for a postpartum visit). Data from study two show that provider interactions are generally poor and that providers are unlikely to be aware of the socio-cultural beliefs that study one showed influence women's and families' responses to illness. Further, important measures of quality such as postpartum counselling and early postpartum check-ups, length of stay, appropriate use of uterotonics, and equity in service provision across caste groups need much improvement. The cost of care in government services is also high relative to the cash

amount available through JSY for BPL families. Median costs for normal deliveries ranged between Rs 1000 – 4000 at PHC, Taluk and tertiary level government hospitals and median C-section cost at the latter was Rs 8000.

### **Discussion:**

While strengthening health infrastructure, equipment, supplies and personnel are ever-present needs, specific, targeted changes can do much to improve the quality of care provided and the experience of care:

Checklists for providers on specific components of recommended care during antenatal check-ups, delivery and discharge (for example, birth planning during antenatal visits, postpartum and neonatal advice given before discharge).

Specific protocols for women with LBW, since it is prevalent (25% of the sample).

Allow women to have a companion of choice present during delivery.

Specific attention to asking women and families about questions they have.

Increasing the length of stay to at least 6 hours for all women with uncomplicated normal births and neonates  $\geq$  2500 gms after observation of breast feeding; longer for women with complications and/or low birth weight infants.

Prioritize routine postpartum care for women, and not only for vaccination of the newborn.

Incentives to improve 24x7 presence of PHCs, since a significant number of women switched because facilities were closed.





# Low coverage of Janani Suraksha Yojana (Maternal protection scheme) among mothers, South 24 Parganas, India, 2009

*Author(s): Dilip K. Mandal, Prabhdeep Kaur, Manoj V. Murhekar*

## **Introduction:**

Janani Suraksha Yojana (JSY) aims to reduce maternal and infant mortality in India and to promote institutional delivery started since 2005. We evaluated Janani Suraksha Yojana in South 24 Parganas district, West Bengal.

## **Methodology:**

We reviewed records, guidelines and conducted cross-sectional survey among rural eligible mothers of JSY having child below one year using cluster sampling and stakeholders by random sampling.

**1. Survey of Stake-holders:** We randomly selected 97 Health Worker (Female)/ ANM, 32 Block Medical Officers of Health (BMOH) & Public Health Nurses (PHN), 12 Gram Panchayat Pradhans and District Nodal Officer for JSY for interview using semi-structured questionnaire.

**2. Community survey:** We selected 256 eligible mothers of JSY, who had child below one year of age by cluster sampling using PPS (population proportionate to size) method. 32 clusters with cluster size of eight were identified. Sample size was calculated assuming 70% utilization of JSY among mothers, 95% CI, power of study as 80%, rate of homogeneity (high utilization of health care service) as 0.3 and design effect as 3.1. In each cluster, we selected mothers randomly. Trained interviewer collected the data using semi-structured questionnaire.

**3. Analysis of performance reports of RCH and JSY of the district:** We collected the secondary data from the records, registers and reports at different levels. We analyzed trends in institutional delivery and JSY beneficiaries covered.

## Results:

Under JSY, pregnant mothers of poor, scheduled caste and tribes get Rs 500 (USD10.7) after completing three ante-natal visits (ANC), Rs.150-350 (USD3-7.5) for transport to government or accredited health institution and Rs.500 (USD10.7) for opting institutional delivery.

*1. Survey of rural-eligible women:* 147/256 (57%) eligible JSY mothers were registered within 12 weeks, 220 of mothers completed at least 3 ANC, 248 of mothers completed one dose of Inj TT. BP was recorded in 72% mothers, weight was recorded in 88% and 42% were mothers tested for Hb%. Of 256 eligible mothers interviewed, 78% (202/256) were registered under JSY, 73% (188/256) got benefits after three ANC. Of benefitted mothers, 11% (20/188) got payment during ante-natal period and 49% (99/188) delivered in institution; 51% (51/99) got incentives after delivery for referral transport and institutional delivery. 57% (29/51)) got incentives before discharge from hospital. Overall, 50% (128/256) mothers had home delivery. 90% (231/256) mothers knew that financial incentives are being given to pregnant mothers but 64% (164/256) heard the name of JSY. Husband's education primary or more (Odds Ratio-2.48, 95%CI: 1.22-5.07) and knowledge of JSY (OR-11.17, 95%CI: 5.9-21.9) influenced getting JSY benefits. Institutional delivery was low in Muslims (OR-0.41, 95% CI:0.23-0.72).

*2. Survey of Stake-holders:* All ANM (97/97), 94% (30/32) of BMOH & BPHN and 58% (7/12) of Panchayat Pradhan had correct knowledge of JSY. Inadequate and late allotment of fund was experienced by district nodal officer, 55% (53/97) Female Health Workers and 47% (15/32) block officials. Health Workers 88% (85/97) identified non-availability of necessary documents hampered payment from hospital. Payment was made daily from 62% (23/37) institutions. No beneficiary was cross-checked by district or state nodal officer.

**3. Analysis of secondary data:** Increase in coverage of JSY benefits from 1959 mothers in June'07 to 14280 in September'09 and institutional delivery from 29% to 36% during April 2008 and October 2009 was seen, but maternal mortality ratio from reported live births and maternal deaths was 108 /100000 live births during 2007-08 and October 2009, however infant death reported in 2007-08 was 2167 and in 2008-09 was 1604 i.e. decrease in infant mortality.

**Discussion:**

Inadequacy of fund and delayed payments lead to low coverage of JSY benefits. Institutional delivery increased with decrease in infant mortality after implementation of JSY. We recommended adequate fund allotment, payment in time, circulation of guideline and reorientation of stakeholders.

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**Package of evidence based interventions  
with an integration of community and  
facility service modes reduce stillbirth and  
neonatal mortality in a rural area,  
Bangladesh**

*Author(s): Anisur Rahman*

**Introduction:**

Achieving Millennium Development Goal 4 - to reduce child mortality remains a major challenge in developing countries. Although post-neonatal mortality has declined, neonatal death continues to contribute to the majority of child mortality in Bangladesh and other developing countries. The objectives are to evaluate the effect of the new integrated maternal, neonatal and child health (MNCH) programme on stillbirth (death of a fetus after 28 weeks of gestation) and neonatal death (death within 28 days of birth) in Matlab, Bangladesh.



**Methodology:**

The study was conducted in rural Matlab in Chandpur district, Bangladesh, where ICDDR,B has been maintaining a health and demographic surveillance system (HDSS) since 1966. A new MNCH program was initiated in 2007 by strengthening the health system, especially linkages between the community and the facility levels. Community health workers were trained in danger signs, referral, and newborn resuscitation. The health facilities were upgraded, including renovations and ensuring essential logistics. Members of clinical staff were given refresher training on evidence-based antenatal, intrapartum and post-partum preventive and curative care, including newborn resuscitation. In total, 10,593 pregnant women were included in the analysis, and stillbirth and neonatal mortality rates, before (2005 - 2006) and after (2008 - 2009) the intervention, were evaluated.

**Findings:**

Before intervention the rates of stillbirth and neonatal mortality were 28/1000 births and 25/1000 live births, respectively. While after the interventions the rates for the same outcomes were 18/1000 births and 15/1000 live births, respectively. After adjusted for socio-demographic variables, the odds of stillbirths and neonatal deaths were 35% (Odds ratios (OR): 0.65; 95% confidence intervals (CI): 0.49 - 0.86) and 39% (OR: 0.61; 95% CI: 0.45 - 0.83) lower, respectively, among the women delivered after intervention in comparison to the women who delivered before intervention period.

**Discussion:**

The new program has substantially improved fetal and neonatal health. Integration of community and facility service delivery modes should be facilitated in the existing health system to improve fetal survival and achieve the targeted goal on child survival.





# **The contribution of Accredited Social Health Activist (ASHA) under National Rural Health Mission (NRHM) in the implementation of Comprehensive Primary Health Care in East Champaran district, Bihar (State) India.**

*Author: Vandana Kanth, Anil Cherian, Jameela George*

## **Introduction:**

The National Rural Health Mission (NRHM) in India 2005-2012 was launched to revitalize a crumbling public healthcare system. A cornerstone of the reforms was the introduction of a cadre of women from villages/hamlets called Accredited Social Health Activists (ASHA). The ASHA represents the latest in a long series of approaches by the government to incorporate a village level health worker.

The present set of reforms under NRHM must be viewed in the context of the global efforts to establish "Comprehensive Primary Healthcare" (CPHC). CPHC in concept involves equity in the access to health care, reducing vulnerability of communities to ill health through community empowerment and an attempt to address the social determinants of health.

The overarching research question that we are seeking to answer is "How can the contributions of the ASHA to Comprehensive Primary Healthcare be strengthened".

## **Methodology:**

The study was undertaken in two blocks in Purbi Champaran District in North Bihar between 2009-10. Mixed methods were used which included Qualitative methods 70 Focus Group Discussions (FGDs) with CBO's and Panchayati Raj Institutions. Key informant interviews were conducted with 199 ASHAs, 17 ANMs, 255 AWW, 15 Panchayat members and 11 Mukhiya's (Villages chiefs)

and others. Participatory methods such as a Venn Diagram ranking were conducted. Intentional sampling methods were used for the qualitative studies. A household KPB (Knowledge Practice & Behaviour) survey of the community was used to assess the effectiveness of the ASHA's. 299 households were included in the sample, which were selected using a multi-level stratified systematic sampling. Bi-variate analysis was done to look at the association between various factors and the effectiveness of ASHA's.

### **Findings:**

- Major contradictions exist in the stated roles of the ASHAs as given in the NRHM guidelines and their actual functioning. Both the ASHAs and other government functionaries and the community understood her role primarily as that of a health provider assigned the special task of caring for pregnant mothers.
- Even in her health provider role, it was mostly restricted to the institutional delivery & immunization services. ASHAs in East Champaran have not been provided of medicinal/ drug kits and so she cannot provide any basic health care.
- The role of the ASHA as a social health activist is not understood by any of the ASHAs interviewed or by any of the other stakeholders.
- The ASHA worker was not involved in any village local health planning, facilitation of BPL cards provision, promotion of toilets & were not linked to the Panchayats.
- The recruitment and training of ASHAs in East Champaran Bihar have not been done as prescribed by the NRHM norms. Most of the ASHAs were recruited by the Village headman (Mukhiya) and in one of the two blocks studied; the medical officer of the PHC selected 33.9% of the ASHAs. The gram panchayat was involved in the selection of less than 10%.

- The training of the ASHA was very varied. One third of the ASHAs in Adapur block were not even trained at induction. Most of the ASHAs only received 7 days of initial training which the PHC medical officer conducted. The main training method used was reading from the manual.
- The ASHAs were hardly supported by the Panchayat. The Village headmen were only involved with her recruitment. Even the assistance that they received from ANMs and AWW was limited. Only 40% of them said they received assistance from ANMs and 60% from Anganwadi workers. The main assistance from the ANM was in immunization and from the Anganwadi it was in identifying pregnant women.

#### **Discussion:**

The study findings show that the ASHAs are unlikely to contribute to revitalization comprehensive primary by either mobilizing the community or addressing the social determinants of health. Probable reasons for this are improper selection process, poor equipping both in terms of training but also the lack of support they receive. The ASHA worker is neither supported by the community or by other government workers. Careful attention needs to be given to the recruitment and training of ASHAs if they are to be effective. They need to be supported and properly equipped if they are to facilitate equitable health.



## **Is Awareness of DOTS among Medical Practitioners in Mysore a Worry?**

**Author(s):** M. A. Khan, Vinayak Nagaraja, Ganraj Bhat Sankapithilu, Sonal Agarwal, Ghazal Dutta, Ashwini, Abhinit Kumar

#### **Introduction:**

At any given moment, more than 13 million people around the world are suffering from an active infection. India



accounts for one-fifth of the global TB incident cases. Each year nearly 2 million people in India develop TB, of which around 0.87 million are infectious cases. It is estimated that annually around 330,000 Indians die due to TB. Since 1993, the Government of India has been implementing the WHO-recommended DOTS strategy via the Revised National Tuberculosis Control Programme (RNTCP). The revised strategy was pilot-tested in 1993 and launched as a national programme in 1997. By March 2006, the programme was implemented nationwide in 633 districts, covering 1114 million (100%) population. However, the awareness of DOTS among the doctors in the private sector was appalling. The purpose was to study the awareness of DOTS among Medical Practitioners in the urban and rural areas of Mysore, in the southern Indian State of Karnataka. The present study sought to compare DOTS awareness among doctors practicing under various settings and across specialties.

### **Methodology:**

A cross sectional comparative study, over two months, was done. The number of participants was 401. The Inclusion Criteria was all Medical practitioners in Mysore District from all possible specialties who came across Tuberculosis patients practicing in private and public sector were approached. All the practitioners were grouped under different specialties; type of healthcare setup; year of graduation - before or after DOTS was introduced. The experience/opinion of doctors who were practicing DOTS was analyzed. Exclusion criteria were practitioners who did not come across TB patients. The tool used was the Chi square test.

All Medical Practitioners practicing in hospitals and nursing homes of urban and rural areas of Mysore who came across TB patients were approached and given a questionnaire that contained questions about the basic knowledge of DOTS, opinion about DOTS from those who practiced it and opinion about treating TB patients from

those who did not practice DOTS. The data thus obtained was tabulated and statistically analyzed. All the doctors who participated in the study were divided on the basis of their specialty, type of health center they practiced in and into those who graduated before and after the introduction of DOTS into the medical curriculum.

### **Results:**

38 % of the doctors who graduated before the introduction of DOTS did not follow DOTS, compared to 14.9% of doctors who graduated later. 100% of the doctors working in Government sector felt that DOTS was better than NTCP; whereas only 85% of the respondents from the private sector felt so. Only 47.9% of the doctors in the private sector practiced DOTS compared to 95.1 % in the Govt. Sector. Hence, the number of doctors practicing DOTS in Private Sector was less than 50 % of that in the Govt. Sector. Both of these comparisons were found to be statistically highly significant ( $p < 0.001$ ). The basic awareness of DOTS expansion and the number of people following it was alarmingly low among orthopaedic Surgeons, Gynaecologists and Paediatricians when compared to Physicians and General Practitioners.

57.5% of the doctors working in Private Sector did not know the nearest DOTS center though they followed DOTS. 64.9% of the doctors who did not practice DOTS, mostly Private Practitioners felt that if the drugs are provided free of cost, people have doubts regarding its potency. All the Physicians & Paediatricians who didn't practice DOTS had a myth that DOTS was ineffective because drugs were not given daily. Among the doctors who didn't practice DOTS, 64.9% doctors said that they would not do so even after coming to know that it is given free of cost, under supervision and equally efficacious. The most prominent reason given was, they had a fear that the patient would not come back for follow up if prescribed DOTS.

**Discussion:**

This study clearly shows that DOTS awareness is awfully low among doctors who graduated before the introduction of DOTS into the medical curriculum, more so among the doctors practicing in the private sector. It also highlights some of the myths and misconceptions, which are hindering some doctors from adopting DOTS. It opens up newer avenues of research to be done to arrive at strategies to address these issues.



## **IMA and TB control: a journey from local PPM DOTS pilot projects to global platform**

*Author(s): S.S. Lal, R. V. Asokan, Gutta Suresh*

**Introduction:**

The Revised National Tuberculosis Control Programme (RNTCP) of India based on the DOTS strategy was adapted and tested since 1993 and achieved nationwide coverage by 2006. Right from the initial days of implementation, RNTCP had begun interactions with the Indian Medical Association (IMA) which culminated in local public-private mix (PPM) DOTS pilot projects in Delhi (1999) and Kerala (Kannur; 2000, Kollam; 2001). These models linked local private clinics, laboratories and private practitioners to various facets of RNTCP service delivery. IMA continued to take a proactive role in creating more national and international models. In the process, IMA faced many barriers and learned lessons which later contributed to policy changes in RNTCP. The purpose of this paper is to document the important milestones in IMA-led PPM, the barriers it faced, the lessons learnt and the future challenges.

**Methods:**

We reviewed documents and records of important IMA-PPM DOTS initiatives. We also interviewed national



leaders of IMA who played major roles in the design and implementation of PPM DOTS in India and other international experts including the staff of international organizations and technical agencies who were associated with the Indian PPM DOTS.

### **Findings:**

IMA-led PPM models namely Delhi, Kannur and Kollam respectively covered populations of 0.1 million, 2.4 million and 2.6 million and their shares were respectively 22%, 25% and 17% of the case notifications in the respective districts while the treatment success rates remained above the global target of 85%. These pilot projects proved that private sector could contribute to additional cases detected while maintaining high treatment success. This evidence and the lessons learnt in the process necessitated development of formal RNTCP guidelines in 2002 for the involvement of private practitioners. On IMA's demand, RNTCP also produced a concise module for training private practitioners.

When the RNTCP launched an intensified PPM scale up project of in 2003 in 14 major cities, IMA took an active role in it at national level as well as in the respective cities. Subsequently IMA in 2004 sent directives to its functionaries across the country to get actively involved in RNTCP thereby starting advocacy for RNTCP which continued through its publications, workshops and official conferences. By 2007, many IMA leaders including its national presidents and secretaries had adopted RNTCP in their own hospitals.

By this time, IMA and RNTCP had felt the need to involve physicians and chest specialists and in 2007 IMA again took the lead to form a coalition of medical professional organizations (IMPACT). Concurrently in these years, IMA in Kerala with assistance from WHO India had trained about 1500 private practitioners by 2006 which created a model for systematic training of private doctors. Success of this training programme and similar ones in

other states encouraged IMA to successfully apply for and become a sub recipient of the Global Fund Round 6 grant in 2007 for scale up of private practitioners' training. IMA was nominated to WHO-Strategic and Technical Advisory Group (STAG)-TB as well as the global steering committee for the development of the International Standards of TB Care (ISTC) document. IMA in turn endorsed ISTC and facilitated endorsement of 'patients' charter for TB care' by governments.

The barriers that IMA faced while building on PPM DOTS were many which included large size and diversity of the private sector, its low priority for implementing public health programmes and reluctance to sign formal agreements with the government mainly for fear of being additionally supervised and controlled by the government. There were also obstacles posed by government counterparts that included lack of experience or reluctance of RNTCP to establish collaborations and difficulties in training, supervising and ensuring quality of services across large number of providers.

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## **The use and misuse of oxytocin – a study in rural Karnataka, India**

*Author(s): Karachiwala B., Matthews Z., Kilaru A.*

### **Introduction:**

The last three years have been characterised by a rise in facility childbirth across India. Poor quality of care is a key constraint to safe motherhood – especially for low-income women in a context of rapid expansion of care. Studies suggest that oxytocin is a drug that is misused, sometimes in a dangerous way, to speed labours in overcrowded labour wards or even in home settings. However in India this has not been extensively studied, especially since the advent of expanded institutional deliveries. To add to the evidence base, information on drugs administered for

labour augmentation was collected during a prospective study of pregnancy and childbirth in south India.

### **Methodology:**

Stratified sample of 642 pregnant women in rural areas of the Indian state of Karnataka selected during the period 2007-2009. Of the total number of respondents, 501 women delivered at an institution and 99 had home births were studied.

### **Findings:**

In-depth interviews with providers revealed that the most commonly available and used drug for labour augmentation is oxytocin. Of the women who had a home delivery, 76.4% were administered oxytocin mainly by an ANM with the dosage ranging between 1-5 injections. Most of these women reported "injections to increase labour" being administered intramuscularly. Of the women who gave birth in a facility, at least 23% were administered oxytocin – mainly also via intramuscular injection.

### **Discussion:**

This is likely to be a conservative estimate of the extent of institutional administration of oxytocin – since many others will have received the drug without explanation. With regard to adequate monitoring of women after receiving the drug, many women reported that providers were not present after administration. In addition, costs of procuring the injections were reported as high in spite of subsidised rates.

In the light of these findings, the paper discusses provider practices within clinical protocols and guidelines for the safe use of oxytocin, a drug critical to safe motherhood but with considerable scope for misuse. The results of our study suggest unnecessary interventions in both government and private sectors, and low quality in many aspects of care.





# Community Based Evaluation of Janani Suraksha Yojana (JSY) Scheme in Trans-yamuna Area of Delhi

*Author(s): Arun K. Sharma, Vikram K., A.T. Kannan*

## **Introduction:**

In India 23-50% of her urban population lives in slums. The infant and maternal mortality rates are high in urban slum areas due to poor access to reproductive health services. In order to improve the reproductive health services, government of India launched the scheme of link workers known as ASHA (Accredited Social Health Activists). In urban areas of Delhi, ASHAs are appointed as the Urban Health Mission is yet to be operational. ASHA are supposed to act as bridge between pregnant women and the government provided health care delivery system in order to improve access under the scheme of Janani Suraksha Yojana (JSY). Success of JSY depends on the ability of the ASHAs to motivate pregnant women for adopting safe motherhood practices. In this study we evaluated the JSY scheme by examining the response of potential beneficiaries.

## **Methodology:**

An evaluation of the same is being done through a cross sectional survey of potential beneficiaries, the ASHA workers and other stake holders in eastern part of Delhi using a set of close ended questionnaire and key informant interview techniques. Potential beneficiaries are the women who had a child birth in last 12 months and were eligible for the benefits under the JSY scheme. Other stake holders were project officers, NRHM officials and ASHAs themselves.

## **Findings:**

This paper describes the preliminary findings from a survey of 185 potential beneficiaries who had a child birth in last 12 months. Among them, 28% were not aware of the JSY scheme. Majority (70%) did not know if they were

eligible for cash incentives under the scheme. Half of them never met an ASHA, 3 out of every 4 could not name the ASHA working in their area. Home delivery occurred in 28% cases. ASHA accompanied 16 (8.6%) respondents to hospital for delivery but stayed with her in 1 case only. ASHA did not bear the transport cost except in 2 cases. Forty respondents received the cash incentive. One in every three respondents was visited by an ASHA after delivery. Only 36% respondents were willing to take help of an ASHA during next pregnancy and 30% were willing to have an institutional delivery. One third of the respondents rated ASHAs as good workers.

### **Discussion:**

ASHAs were appointed in trans-Yamuna area of Delhi in 2004-05. The present survey suggests that the interaction between ASHAs and the potential beneficiaries is yet to attain the optimum level. Awareness about JSY is also low among the beneficiaries. The participation of ASHAs in taking women to institutions for delivery has been very poor. The ASHAs did not seem to have won the confidence of the respondents as is evident from the finding that only a third of them were willing to take help of ASHA in their next pregnancy. But on the other hand, among those who have interacted with ASHAs, 40% of them gave a satisfactory rating of the ASHAs.

The link workers (ASHA) need to be more proactive in providing support to the pregnant women in the area and need to improve upon their interaction with the potential beneficiaries.



# **Study on Road Traffic Injury Emergencies in Karnataka - Evidence from 108 Emergency Medical Services.**

*Author(s): M. Nagavara Prasad, Biranchi Jena*

## **Introduction:**

Road traffic injuries (RTI) are a significant burden on the health care system in India. These are the leading and commonest cause of deaths and hospitalizations. It is estimated that 1.1 million deaths and 22 million hospitalizations are likely to occur in India in 2010. According to National Crime Records Bureau (NCRB) Report 2008, RTI rate was observed 15.3/100,000 population in Karnataka, which was higher than national average 10.8/100,000 population and occupies 3rd rank in RTIs rate among the southern states of India. Emergency medical services (EMS) are an essential part of the overall healthcare system as it saves lives by providing care immediately. GVK EMRI (Emergency Management and Research Institute) is a pioneer in Emergency Management Services in India, which provides comprehensive free emergency services and operating in Public Private Partnership (PPP) mode with Government of Karnataka. This study aimed to describe the distribution patterns with respect to call volume, response time, socio-economic and demographic characteristics of the reported road traffic injury emergencies to 108 emergency medical services in Karnataka.

## **Methodology:**

The present study was based on the retrospective data of 23,888 reported cases of road traffic injury emergencies in GVK EMRI operation in Karnataka from January 2009 to December 2009. In this study, frequencies and proportions were used for descriptive purposes. Statistical data analysis was carried out using SPSS version 16.0 and chi-square test of significance was used to examine the



association of socio-demographic variables with the health status of the victims.

### **Findings:**

The results showed RTI emergencies reporting rate of 69 cases per lakh population in Karnataka. Among all the reported RTIs, around 47% were due to two wheeler accidents. The age group 20-29 was noted high reporting as 32 %, next follows 30-39 age group (24%) and with the mean age of 33 years. Males (83%) were more susceptible to RTI emergencies than females (17%). A social evaluation of RTI emergencies revealed a higher reporting from other caste (38%) and backward caste (36%) and victims who were above poverty line (67%). The mean response time was observed as 20 minutes to provide emergency medical services for reported RTI emergencies and 18% victims of RTIs utilized the Emergency Response Center Physician (ERCP) advices. Around 97% were successfully given pre hospital care and admitted in the appropriate hospital for definite care. Again the data revealed that 3% of the victims were observed as dead before arrival of emergency ambulance indicating sudden severity of road accidental death. Age was found to be significantly associated with unexpected road accidental deaths ( $p < 0.05$ ) with 29% of the deaths were in age group of 20-29 years. The highest reported cases of RTIs were observed in Bengaluru Urban district (16%) followed by Belgaum (8%), Bellary (6%) and lowest were reported in the district of Kodagu (less than 1%).

### **Discussion:**

The current study stresses the scale and seriousness of the emerging challenge of RTI emergencies, with particular emphasis on young and socio-economic groups. The on-scene alive to death ratio was found to be 32:1 indicating more improvement in EMS system by examining the risk factors for on-scene deaths. This paper also recommends further scope of research activities in order to better information flow, better management of RTI emergencies and its prevention.

# **"First We Go to the Small Doctor": 1st Contact Healthcare Providers of Rural Communities in Andhra Pradesh and Orissa, India**

*Author(s): Meenakshi Gautham, Erika Binnendijk, Ruth Koren, David M. Dror*

## **Introduction:**

Public supply of primary health care has been insufficient to meet the needs of rural India's 700 million population. The Government of India launched the National Rural Health Mission (NRHM) in 2005 to provide accessible, affordable and quality healthcare to rural persons. Our study, conducted between 2008-09, three years after the NRHM was initiated, investigated the provision and utilisation of healthcare at first contact for rural communities in the states of Andhra Pradesh and Orissa.

## **Methodology:**

The study was located in two districts in Andhra-Pradesh (AP) and three in Orissa. Our cross sectional study design combined a Household Survey (1,810 households in AP; 5,342 in Orissa), 48 Focus Group Discussions (19 in AP; 29 in Orissa), and 61 Key Informant Interviews with healthcare providers (22 in AP; 39 in Orissa). Fieldwork occurred during 2008 (AP) and 2009 (Orissa).

## **Findings:**

In AP, 69.5% of respondents accessed non-degree allopathic practitioners (NDAPs) practicing in or near their village; in Orissa, 40.2% chose first contact with NDAPs and 36.2% with traditional healers. In AP, all NDAPs were private practitioners, in Orissa "public sector NDAPs" e.g. some pharmacists and nurses employed in health facilities, also practiced privately. Respondents explained their choice of first contact by proximity and providers' readiness to make house-calls when needed. In both states, NDAPs combined consultation and dispensing allopathic

drugs for a quick-fix treatment of common health problems. NDAPs referred patients to qualified physicians when they suspected a serious illness or when their treatment did not deliver results quickly. Only a minority of respondents chose qualified doctors first (around 25% in AP and 12.9% in Orissa); qualified doctors approached were mostly private practitioners in AP, and public servants in Orissa. Respondents that chose qualified doctors stated the reason was mostly quality of care.

People did not differentiate between "small doctor" and "big doctor" at the first level. Factors like distance and cost determined people's care-seeking preferences more than providers' skills or accreditation. This alternative treatment trail was mostly at odds with government policy, and people consulted professional doctors only when they, or their first contact NDAP, perceived a specific reason to do so.

### **Discussion:**

Our study emphatically demonstrates that the huge need for primary level curative healthcare in rural areas is different from what the public 3-tier system is designed to provide, and that this need is satisfied mainly outside the public system.

The clear message of our study is that the rural population in India has confirmed a need for "consult-cum-dispense" healthcare services (for most common illnesses) to be delivered most hours of the day and at doorstep (or at least served in or near their village). The architecture of this treatment trail is crafted by the demand side, and has been solidified by the propagation of NDAPs practicing at village level. This need among rural communities' for proximate all-in-one first level healthcare is unlikely to disappear even if all the PHCs and CHCs were to become fully staffed and well equipped. Public health departments would have to devise and implement new solutions for more proximate - virtually doorstep - primary care that should combine consultation and



dispensing of medicines, and would function many more hours. One obvious option to address this need immediately would be to harness the vast human capital of NDAPs that are dispersed in rural areas.

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## **The role of the ASHAs in effective health care delivery: Evidence from a study in South Orissa**

*Author(s): Arima Mishra*

### **Introduction:**

In its aim at providing effective health care to the rural population, one of the key interventions of NRHM has been to recruit ASHA (Accredited Social Health Activist) workers at the village level. The role of the ASHAs as envisaged in the NRHM Mission document is to act as an interface between the community and the public health system. More specifically, she is responsible for promoting universal immunization, referral and escort services for RCH and other health care delivery programs. This paper, in this context, would discuss the role of the ASHAs in fulfilling these responsibilities thus facilitating access to quality health care in rural areas. The paper draws on data collected as part of a larger research project on 'Explaining differential immunization coverage in India and Malawi\*'.

### **Methodology:**

Data were collected using anthropological tools i.e. a) observing and following up on the ASHA's role on Immunization days, escorting her and the pregnant woman to the PHC/Hospital for deliveries b) attending ASHA training and ASHA monthly meetings and c) conducting in-depth interviews with ten ASHAs working in different villages. The fieldwork was done in Koraput district of Orissa in May-September 2010.

### Findings:

Some of the key findings are: a) All ASHAs are nominated by ANMs of respective sub-Centres and hence the involvement of the community and village panchayat in selections of ASHA has been very limited b) the ASHAs hence look upon themselves as another cadre of state health workers accountable to the medical supervisor in the PHC than the Panchayat and the community, this certainly hinders the primary role of the ASHAs c) different ASHAs understand their work profile differently. Those ASHAs who double as an NGO worker or a member of the Self-Help Group set a larger work profile for themselves than others d) yet, one common distinctly visible role of all the ASHAs is 'taking care of the pregnant women' which essentially includes promoting three pre-natal check-ups and institutional delivery e) the cash incentives have certainly pushed the number of institutional deliveries up as the ASHAs make all possible efforts to take the pregnant woman to the PHC or the hospital for delivery f) the immunization coverage has also gone up as the Immunization days are conducted on a regular basis in the village g) the cash incentives (for all the ASHA work) however have several unintended consequences i) diluting the focus on safety associated with institutional delivery. The ASHAs along with other health workers incite pregnant women to deliver in the hospital on monetary grounds only ii) ASHAs prefer to work in several villages as they translate it as 'more villages, more cases and more money' h) the role of the ASHAs is also affected by other constraints towards institutional delivery that include the distance and limited facilities available in the PHCs i) sub-centres which are closer to the villages offer no facilities whatsoever j) the community responds to the ASHAs better when they offer a range of services including curative services (medicines for common ailments like malaria, diarrhoea) k) ASHA coordination meetings are essentially a platform for submission of records than discussing field experiences.

**Discussion:**

The policy implications of such evidence include a) there should be more community involvement in recruiting and discussing the responsibilities of the ASHAs. This will enable them to effectively act as a bridge between the community and the formal health care system b) the contributions of the ASHAs can also be enhanced by strengthening the health care institutions. The sub-centres and the nearby PHCs (N) could be better equipped for institutional deliveries as referral to long distance hospitals acts as a major deterrent for institutional deliveries and c) there should be more scope for discussion and feedback among the frontline health workers and the supervisory staff.



## **Putting newborns first- an assessment of Special Care Newborn Units in 8 districts in India**

*Author(s): Sutapa Neogi, Sumit Malhotra, Sanjay Zodpey, Pavitra Mohan*

**Introduction:**

India carries the single largest share of neonatal deaths in the world- around 25-30% of the world wide total. Neonatal mortality rate (NMR) of 44 / 1000 live births in India is high and stagnant. Special Care Newborn Units (SCNUs) are being set up to provide quality level II newborn care services in district hospitals to meet this challenge. The units are located in some of the remotest districts where the burden of neonatal deaths and accessibility to special care is a concern. With initial success achieved in establishing a level II neonatal unit in a remote district in India, a decision has been taken by the government to scale it up across every district.

The study was conducted with the objective to do a situational analysis of the SCNUs, assess their



performance, identify bottlenecks that affect their functioning and sieve out lessons for scaling up in the country

### **Methodology:**

The evaluation was based on the analysis of both primary and secondary data from the 8 units. A cross sectional survey was done to assess the situation in terms of availability of resources- human and equipment, and practices followed. Descriptive statistics was used to analyze the inputs (resources) and outcomes (morbidity/mortality). Mortality rate among admitted neonates was taken as the key outcome variable to assess the performance of the units. Its trend over a period of years in each of the units was determined. Its association with possible contributory factors like bed: doctor ratio, bed: nurse ratio, average length of stay, bed occupancy rate and asepsis score was determined.

### **Findings:**

The units located in district hospitals are functional for > 1 year. They have varying nurse: bed ratio (1:0.5-1:1.3, ideal= 1:1.2) and doctor: bed ratio (1:2.6 - 1:7, ideal= 1:4). In the past year, the admission rate increased from 16.7/100 deliveries (2008) to 19.5/ 100 deliveries (2009). Bed occupancy rate ranged from 28-155% (median:103%) and average length of stay ranged from 2-15days (median: 4.75 days). Major reasons for admission as well as major causes of deaths were: birth asphyxia, sepsis and LBW/prematurity. Absolute reduction in NMR ranged from 4-40% in different units in the first year of its functioning. Proportional mortality due to sepsis and low birth weight declined significantly over 2 years (LBW <2.5kg). About 14%, 30% and 50% of the variation in NMR across the units was explained by bed: nurse ratio, average length of stay and adherence to asepsis measures respectively. Repair and maintenance of equipments remains a major concern.

**Discussion:**

These level II units are highly resource intensive in terms of cost incurred in establishment, purchase and maintenance of equipments and its running cost.

A lot of government support and political will exists. The utilization of services has increased over the years and significant gains in terms of mortality reduction have been achieved. However, absence of a functional network of newborn corners at every place of delivery, neonatal stabilization units at every block level hospital and SCNUs have created an overdependence on SCNUs. This has resulted in admissions beyond what an SCNU can accommodate and are putting a lot of pressure on already stretched resources. Sharing of beds and compromised quality of care are major concerns.

A large number of doctors and nurses are working on contract, their instability and dissatisfaction impedes their performance. Those who are permanent have been deputed from PHC/CHCs. Frequent breakdown of equipments and their lack of timely repair pose hurdles. Lack of Annual Maintenance Contract and distance from state headquarters are cited as common reasons for poor performance. Most of the essential drugs are available in meager amounts through government supply but yet not fully utilized. Funds are optimal but lack of clear guidelines for its utilization is often an obstacle.

Level II neonatal units with state of art facilities are a boon to the health care system. Challenges are many with diverse magnitude. Mechanisms to address them should be prioritized and workable solutions identified. Scaling up should be done in a phased manner in order to maximize gains.



## Tracking Of Diphtheria Cases From A Tertiary Care Center In Chandigarh: Inputs To Strengthen The IDSP Programme

*Author(s): Bharti B., Kh. Trusty, Laxmi, Singh A*

### **Introduction:**

An increase in diphtheria cases has been noted worldwide, especially in the last few years. According to the World Health Statistics 2010 report, India is contributing to 85 % of the total worldwide cases of diphtheria. In the recent past, the Advanced Pediatrics Center, PGIMER Chandigarh has recorded a spurt of referrals in the cases of diphtheria, especially from the district of Saharanpur, Uttar Pradesh. Keeping this in view, an audit was done to track the surveillance of these cases under the Integrated Diseases Surveillance Project (IDSP) was undertaken. This audit also explored the reasons for the non-vaccination against diphtheria in this population.

Study Setting was Advanced Pediatrics Center, PGIMER, Chandigarh, District Hospital Saharanpur Village Buddhakera, & IDSP Office Chandigarh & Saharanpur.

### **Methodology:**

Cases admitted with Diphtheria in Advanced Pediatric Centre, PGIMER, and Chandigarh during the month of August and October 2010 were included to track their reporting. A systematic tracking of the flow of information of the Diphtheria cases was undertaken. This pathway was compared to standard pathway as per the operating manual of IDSP.

### **Observations:**

A total of 15 cases of severe diphtheria were seen in the Advanced Pediatric Center during this period. Six cases of Diphtheria reported to the hospital before 5th of September. The flow of information was tracked thereafter and visits were made to Saharanpur, Village Buddhakhera and the IDSP offices of Saharanpur and Chandigarh. Most of the cases were from Muslim families. More than 40 % of



the affected children died. One of the parents of the previous years' diphtheria victim was contacted to assess the awareness and the actual situation of the immunization programme in their community. Discussions with the local community revealed that concern of potential harm with the vaccines and ignorance about the immunization schedules as the common cause for non-compliance. Most of the parents had however immunized against Polio and there seemed to be no apparent resistance to the vaccination.

Discrepancies in the reporting of cases were identified both in the Public and Private health sector. Information of suspected cases of diphtheria seen at the District Hospital Saharanpur before referral to PGIMER remained unreported. There were discrepancies in the number of cases of Diphtheria seen in APC PGIMER and the numbers reported to the IDSP unit at Chandigarh. None of the cases were, however, reported to the IDSP Saharanpur. There was no transmission of information at the National level. The reasons for non-reporting were incomplete addresses and non-availability of contact number of the IDSP Saharanpur. Despite the availability of a 24-hour helpline, under the IDSP scheme, to report any unusual health event or epidemic, the operator was unaware of Diphtheria being a communicable disease.

### **Discussions:**

Field realities reveal discrepancies in the reporting under the IDSP programme. This audit highlights the need to strengthen the existing surveillance system in response to the reemerging threat of Diphtheria in selected communities.

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# Women's experience of the quality of care in institutional delivery: Evidence from a prospective study in rural south India

*Author(s): Kilaru A., Karachiwala B., Matthews Z.*

## **Introduction:**

In a context of steeply rising institutional births in India – the question often raised is the quality of care in increasingly crowded labour wards. The success of a policy that encourages hospital birth depends on improved standards of medical care, and also crucially, an adequate level of service satisfaction on the part of women and their families. Not only does quality of care influence health outcomes, it is also likely to affect Understanding utilization of services, women's perceptions of interpersonal aspects of care and the content of services received were central aims of the study.

## **Methodology:**

A prospective study was undertaken from 2007 to 2009 in 80 villages in a taluk of Karnataka situated between 50-80km from the state's capital of Bangalore (n = 642). 39 villages were selected in a stratified random sample according to the distance to the PHC. An additional 41 villages adjacent to the randomly selected villages were purposively chosen to meet the enrolment target.

## **Results:**

Findings show that 80% of the women delivered in a range of institutions. Taluk hospitals conducted twice the number of deliveries compared to PHCs and sub-centres. ANMs and nurses handled about 90% of the PHC deliveries, with doctors playing a primary role at the taluk and tertiary care hospitals. About 18% of women in the sample delivered at home and the majority with unskilled birth attendants.

A large percentage of families (43%) changed their mind about where the delivery should take place, mostly after

labour began. Referrals account for only 25% of those who changed, and other reasons include fear of complications or expecting that the health centre would be closed.

Women's perceptions of provider's interpersonal communication, respect for privacy and confidentiality, and comfort in asking questions show predictable as well unexpected differences between public and private services.

Other findings relate to quality of service provision. About 35% of institutional labours were augmented with oxytocin, and 62% of women left health centres in 6 hours or less, and most without postpartum or newborn care advice. Stratification by caste show that SC/ST women are experiencing poorer quality of care.

#### **Discussion:**

In light of the current policy that aims to achieve 100% institutional deliveries, our data show that high percentages of women receiving poor quality of care and that differences in public vs. private care are not uniformly in favour of the latter. This may discourage future institutional contacts and limit the intended impact on maternal and newborn mortality and morbidity. Furthermore, in a state such as Karnataka that performs better than the national average on most health indicators, equity analyses need to explore disparities beyond mortality rates to understand quality of care experienced by women from poor and low caste families.

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## **Status of Emergency and Trauma Care services in Rural India**

*Author(s): G. Gururaj*

#### **Introduction:**

Injuries are among the top ten leading causes of deaths and disabilities in India. Precise and reliable data on injuries is



limited due to lack of surveillance programmes and systematic research in India. Trauma care comprising both emergency and pre-hospital care is limited, especially in remote areas. Despite small improvements in recent years, the quality and reach of trauma care has been limited resulting in delays and inappropriate care for injury victims. The present review focuses on the current status, identifies gaps and identifies required mechanisms for strengthening trauma care using findings from the rural component of the Bangalore Road safety and Injury prevention programme and other secondary data sources.

### **Methodology:**

The rural injury surveillance program was included under the Bengaluru Road safety and Injury prevention program and undertaken in the rural district of Tumkur. The objective was to identify the burden of injuries and the pre hospital care patterns of the injured in the rural area. In the rural injury surveillance programme, information on fatal and non-fatal injuries was collected using pre-structured standardized data capture formats. Information on injury deaths was gathered from the office of the District Police Superintendent and non-fatal injury data was collected from Sri Siddhartha Medical College and hospital and the District Hospital, Tumkur. This review has been done by searching the various databases like Pubmed, Google scholar etc and various secondary sources of information have also been included.

### **Results:**

For the year 2009, there were 1309 injury deaths and 7353 injury registrations. The leading cause of fatal injuries was Road traffic injuries (34.1%), poisoning (15%), drowning (13%) and hanging (13%). Among the non-fatal injuries the common causes were Road traffic injuries (52%), assault (19%) and poisoning (12%). Over half of the deaths occurred at the place of injury, with another 17% of deaths occurring during transportation and one third after admission to hospitals. Only one out of five injured persons received first aid. Majority of the injured were transported

to the hospitals by private vehicles. Only 15% of the injured reached hospitals within one hour of the injury. One in four of the injured visited more than one hospital for injury. One fourth were referred by a private practitioner, private nursing homes or primary health centres.

#### **Discussion:**

Rural areas are facing the triple burden of Injuries, Communicable diseases and Non communicable diseases. The vital issues in trauma care in the rural areas include the lack of first aid at the place of injury, the longer time interval to reach a definitive hospital for acute care, the deficiency in the transportation system to the hospitals, and referral from hospital to hospitals. There is need to strengthen facilities and trained manpower to meet the needs of trauma patients. There is need to formulate and implement efficient pre-hospital and trauma care programmes to reduce deaths and disabilities in rural areas.

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## **EMS Survival Value Chain- An Analysis of Probable Cardiac Emergencies presented to EMS in selected states.**

*Author(s): Biranchi Jena, Adibabu Kadithi, Srinivas Rao,  
G. V. Ramana Rao*

#### **Introduction:**

The overall healthcare system is a value chain comprising three major components viz. pre-hospital care, definite healthcare (hospital care) and rehabilitation. Pre hospital care through Emergency Medical Service (EMS) is occupying an important place due to growing incidence of life style based human injuries, accidents and cardiovascular ailments. EMS system is an important link in the health services value chain and consists of three major components viz. on-scene care, care during transport and patient hand over at health-care unit. Proper coordination

and functioning of these three components would improve the overall survival of the emergency victims. Thus an effective evaluation mechanism is important to track the functioning of EMS value chain and to implement strategies for improvement. The current study evaluates the EMS value chain in cases of cardiac emergencies by analyzing survival rate at various stages of handling the cardiac emergencies.

### **Methodology:**

The current study is a retrospective study of 102957 probable cardiac emergency reported to EMS system in the state of Andhra Pradesh, Goa, Gujarat, Madhya Pradesh, Meghalaya and Uttarakhand during the year 2009. The data was obtained from the GVK Emergency Management and Research Institute, India's first integrated EMS service provider running under Public-Private Partnership (PPP). Observed deaths at scene (death before arrival ambulance), en-route (suspected deaths as observed by EMTs during transport) and at hospital (death at hospital after 48 hours) were studied by using descriptive statistics. Logistic regression model was used to stratify the risk factors affecting to the survival rate of cardiac emergency victims.

### **Findings:**

Cardiac emergency accounts for five percent of the total reported emergencies in the selected 6 states and the reporting of such emergencies is growing at a CAGR of 96% during 2007 and 2009. As far as reporting rate of cardiac emergencies are concerned, Goa reported more number of cardiac emergencies (93 per one lakh population) than Gujarat (45), AP (35), MP and Meghalaya (17). 55% of the cases were reported from population of 50 years and above and more elderly victims were reported in Goa, Uttarakhand, Madhya Pradesh.

Of the total reported cardiac emergency cases, 7% were found to be expired before arrival of ambulance. This proportion was found to be higher in AP (8%) and Gujarat (6%). The hospital deaths after 48 hours of EMS support



were recorded at 14%, with a higher proportion of 22% in Uttarakhand and 18% in Gujarat. Of the total death cases recorded during provision of EMS, 72% was found to be as on scene deaths, one percent was suspected as dead during transport and 27% as dead at hospital after 48 hours. Response time (from receiving the call to reaching the victim) in handling the cardiac emergency cases was 20 minutes with Uttarakhand and Meghalaya showing a higher response time of 29 minutes because of accessibility in hilly terrain. Though, response time was not found to be a significant predictor, deaths at scene was affected by the higher response time (RT) as RT of more than 15 minutes resulted 1.14 times more risk of on scene deaths as compared to RT less than 8 minutes.

### **Discussion:**

The current research study indicated better reporting of cardiac emergencies in Goa as compared to prevalence rate. More awareness is needed in the states of Andhra Pradesh, Gujarat and Madhya Pradesh as the reporting rate is comparatively low than the prevalence rate. Majority of the cardiac emergency deaths were noted at the scene before arrival of the emergency ambulances. This indicates either sudden cardiac deaths or delay in reporting to the EMS service provider after the onset of cardiac emergency symptoms. Thus an in-depth study to understand the etiology of on scene deaths and proper triage to appropriate hospitals to reduce the on-scene deaths and hospital deaths to improve the EMS value chain. GVK EMRI's project on Strategies for Advancement in the Value-chain of EMS in case of cardiac emergency (SAVE heart) targets to reduce the current on scene deaths (before arrival of emergency ambulance and help at the victim's location) of 8% to less than 5%.



# Impact of EMRI services on public health delivery system in India

*Author(s): Priyanka Chaman*

## **Introduction:**

As India is fighting to strengthen its health care delivery system, pre-hospital care (emergency ambulance services) still remains the most neglected part of India's health service system. The importance of pre hospital care cannot be underestimated in the Indian scenario especially in the rural areas where immediate health care is poor and services are distant. Most people in India succumb to death due to non-availability of quick and quality emergency medical support. Trauma continues to be one of the major causes of death in India. A report released by the transport research wing of the ministry, said that in 2008, the country witnessed 4.85 lakh road accidents in which 1.2 lakh people lost their lives. It is estimated that from its present position of the ninth leading cause of deaths in India, trauma will move up to third position by 2020. Maternal mortality also remains one of the most daunting public health problems in India and its reduction has been identified as a prominent component of the National Rural Health Programmes. The country contributing approximately 20% to 24% of the world's maternal deaths emphasize on the reduction in '3 delays' for improving service delivery where the second delay is in reaching an appropriate health care facility due to lack of affordable and accessible quality emergency transport. A study conducted in Mpumalanga showed that lack of emergency transport between health institutions was a major factor in at least 38% of maternal mortalities. In such a healthcare system the benefits of involving private players under NRHM in 'public-private partnership model' was seen as an opportunity by Government of India. The success of pre hospital care services under EMRI has further boosted the confidence of policy makers. A study showed reduction of 50% in maternal mortality ratio for the 1, 21,454 cases

handled by EMRI in Andhra Pradesh.

The present study revealed the impact of EMRI services in the state of Goa based on all the reported emergencies from Sept 2008 to March 2010.

### **Methodology:**

The present study used 'life saved data' from Pre-Hospital Care Records(PCR) which are emergency pre-prepared hospital care records maintained by the emergency medical technician in the ambulance, response records and 48-hour follow-up records maintained by the emergency response officer. A closed ended interview schedule was also executed on 20 patients at Government Medical Hospital, Bambolim, Goa to understand the effectiveness of emergency response services of EMRI in the state. The study also involved collection of data by a comprehensive review of literature on EMRI services in India.

### **Findings:**

There has been an increased utilization of EMRI services which was evident from the number of calls received for emergency increasing from 15% in Oct'08-March'09 to 20% in Oct'09-Mar'10 while police and fire emergencies were only 2%.Of the total 43,835 cases handled by 108 Emergency Response Service, 31.8% of the cases were trauma related, 8.12% cardiovascular emergencies, and 7.5% pregnancy cases. Successful 48 hour follow cases (50%) showed that 3894 lives have been saved .The maximum saves were of trauma cases followed by cardiovascular emergencies. The best indicator is the response time of less than 30 minutes, the best in all states so far. The patient survey indicated that satisfaction levels were above average in 95% of cases.

### **Discussion:**

EMRI has been able to instill confidence and trust among people especially in rural areas to use 108 ambulance services during medical emergencies leading to increased utilization. However Government must consider providing a continuous effective system of emergency



medical care with a lead EMS (emergency medical service) agency nationwide, having the authority to plan appropriate rules and regulations for each recognized component of the EMS System such as standardized treatment, transport, communication, disaster management etc. A comprehensive education survey needs to be conducted periodically to review the needs of the population and to ensure the providers have the skills and knowledge required to meet them. Last but not the least, every effort has to be made to make EMRI more than just a transport system.

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## **Verbal Autopsies of Maternal Deaths in Koppal, Karnataka: Lessons From The Grave<sup>3</sup>**

*Author(s): Aditi Iyer, Gita Sen, Anuradha Sreevathsa, Vasini Varadan*

### **Background:**

Maternal deaths bear important lessons for death prevention, as they mostly occur due to failures to prevent and respond to obstetric emergencies. These lessons are worth taking. The verbal autopsy can enable such learning and become a useful resource for programme managers and policy makers if it identifies lapses in death prevention in ways that suggest what corrective actions can be taken.

A review of the worldwide literature shows that most verbal autopsy applications to date focus solely on identifying the medical causes of maternal mortality. While such autopsies reveal how the different causes of death are clustered, they do not directly address health system issues. A smaller group of studies examine social causes using the 'Three Delays Model' to classify the factors that prevent timely access to medical care in an emergency. However, the model does not directly identify the operational issues that constrain health system functioning nor familial and community-level barriers. Given this, the GHE Project developed a qualitative methodology that

departs from existing approaches in significant ways and enables in-depth analysis of the social and medical causes of pregnancy-related deaths.

**Objectives:**

- To describe the methodology developed by the GHE project to analyse and learn from maternal deaths.
- To identify from the autopsies the types of failures that result in preventable maternal death, as well as the factors that drive them.
- To make suggestions for how death prevention measures by public health services can be strengthened.

**Methodology:**

The GHE project investigates every pregnancy-related death that occurs in 67 villages of Koppal district, Karnataka. Of these, 23 deaths were investigated using its qualitative methodology through 7 stages: (1) death notification, (2) data gathering, (3 & 4) construction of the narrative and timeline, (5 & 6) analysis of the social and medical causes of death using flow charts and standard guidelines, and (7) identification of corrective actions. The methodology tackles the issues of power and positionality in concrete ways that will be described.

**Salient findings:**

In poor regions like Koppal, where anaemia and pregnancy-induced hypertension are widely prevalent, the period prior to the emergency is as important for death prevention as the emergency itself. However, in their inability to accurately detect and effectively manage risks, health providers fail the women more critically than their families.

Demand generation by ASHAs and the availability of the 108 ambulance result in women going to PHCs or CHCs for delivery by choice. But the doctors and staff nurses at these facilities are not always able to triage (i.e., identify emergencies and prioritise treatment or referral for them) when multiple in-patient admissions take place simultaneously.

Post-partum haemorrhage is the most common cause of maternal death, but this is at least partly due to inappropriate delivery practices by both government and private doctors (e.g., premature application of fundal pressure to hasten delivery, pulling of the cord to hasten placental delivery) and ineffective treatment of the ensuing haemorrhage without ascertaining its cause.

The 3 Delays Model is not always helpful because it links every failed action to one or another delay while leaving unspecified the factors that underpin it. This is not the case. Inappropriate health provider behaviour and/or treatment in hospitals that stem from a lack of responsiveness or accountability during emergencies do not cause any delay, except in a tautological sense. On the other hand, the inability of government doctors in PHCs and CHCs to identify emergencies and make effective referrals does result in delays.

**Recommendations:**

The capacities of PHC doctors, ANMs and ASHAs to identify and manage pregnancy-related risks, and those of doctors and staff nurses in PHCs and CHCs to triage need to be strengthened through practical problem-solving training programmes on a continuing basis.

To enable more accurate detection of risk:

- ANC check-ups need to become comprehensive and independent assessments that go beyond self-reports by women and/or their families, as there is a tendency to normalise risk.
- Diagnostic methods in use need to be accurate.
- Communication between health providers and women/their families need to be strengthened to enable greater adherence to treatment.
- The management of risks needs to be closely monitored through more meaningful follow up.
- The death review and audit processes need to be strengthened through external reviews and the involvement of independent experts.



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# **Human Resources for Health**



# Determinants of performance of Doctors in the Public Health Systems of three states of India

*Author(s): Shiv Chandra Mathur, Thamma Rao*

## **Introduction:**

Shortage of health manpower is a universal problem. In India, this is more so in context of Doctors in public systems. Issue of filling up the void and rectifying the misdistribution of medical manpower has received the priority attention of National Rural Health Mission (NRHM) launched countrywide in 2005. NRHM is generously providing inputs to the states to bring their peripheral health facilities on set Indian Public Health Standards. Initiating this intervention required analyzing the existing situation and devising solutions based on current observations.

National Health System Resource Centre (NHSRC) under the MoHFW, GoI initiated the workforce determinants studies in context of medical and nursing personnel in several states of India in 2009. This paper highlights the observations from three such states viz. Jharkhand, Rajasthan and Uttarakhand on the performance of Doctors in the rural health facilities.

## **Methodology:**

In each state, three districts were sampled on the basis of low, average and high human development index where in-depth analysis of peripheral facilities was carried out. The study involved interaction with policy makers, Directors, and Consultants at State level, executives and Managers at district level and Doctors at the rural facilities. Policies of recruitment, deployment, postings and trainings of generalists were examined Gaps between the services expected and provided were identified. Objective criteria of performance - like outpatients seen, investigations done, night duties performed - were recorded.



**Findings:**

Common determinants which influenced the performance of Doctors in three states include sense of alienation from the village; role ambiguity in terms ill-defined referral system; improper residential facility; lack of induction and in-service orientations; lack of supervision; and want of equipment, medicines and furniture.

Doctors working in rural facilities desire their first posting in a familiar environment. They usually begin their career in a conflict between becoming a Specialist at a younger age or to continue as generalist in periphery. They also struggle to overcome the mindset created in the Medical College of working in an inter-dependent tertiary care set-up.

State specific issues denoted that sparsely distributed population in deserts of Rajasthan fails to hold the consistent presence of Doctors at peripheral facilities in the want of work s/he likes to do. Lack of HR policy leads to indiscriminate deployments and facilities far from IPHS dilutes their interests.

Chattisgarh and Uttarakhand, relatively new states, are in the process of concretizing their induction processes. Uttarakhand has the unique challenge of hilly tracks and high altitude while Jharkhand is afflicted with the problem of equity with some districts very poorly developed and habitations of large tribal population. Both these statutes are emulating the larger states in floating several incentives to attract Doctors to the rural facilities

**Discussion:**

Findings of this study reinforce the disillusionment of our policy framers that how deep an allopath medical graduate is to be taken in the rural interior; and how to strike a balance between generalists and specialists on one hand, and between generalist Doctors and task force of nursing and paramedical personnel on the other hand, The study has evolved the state specific short-term and long-term solutions to make Doctors available everywhere. The

biggest challenge in public system seems to be the conflict of interests between politicians, bureaucracy managing health system and medical fraternity.

By the time, the findings of this study were finalized, Health System at the national level is found to be concretizing the deployment of male workers at the most peripheral level of high focus area of the country, and concurrently struggling to formalize the strategy and curriculum for bachelors of Rural Medicine and Surgery.



## **Study of Initiatives to address shortage of specialists for Emergency Obstetric Care in Maharashtra**

*Author(s): Sarika Chaturvedi, Bharat Randive*

### **Introduction:**

Emergency Obstetric Care (EmOC) is one of the concrete "service guarantees" of the NRHM. However the Indian public health system suffers from a severe shortage of specialists to deliver EmOC. As part of a present study of EmOC provision in Maharashtra, we studied the Government's strategies to expand the network of skilled providers like task shifting for anesthesia and obstetric services, various models of public private partnerships. This study fills the gap of systematic studies of the potential demonstrated by such initiatives, their influence on the size and distribution of obstetric and anaesthesia providers and the related service uptake. We hope the evidence generated shall guide the policy makers on the choice of initiatives to correct the shortage of obstetric and anaesthesia providers for EmOC in the country.

### **Methodology:**

We used a mix of quantitative and qualitative methods. We conducted a facility survey of all secondary and tertiary health care facilities (44) in 3 selected districts. We

interviewed medical superintendents and specialist obstetric service providers at public facilities (20), selected private obstetricians and anaesthetists (15) and the district health officials and programme managers. We mapped the location of the private obstetricians in the three districts. In order to study access, we conducted a community level survey in 272 villages covered by 60 randomly selected sub health centres in selected blocks (6) in these districts that listed all women (1833) from BPL/SC/ST communities who had their first or second live birth in recent one year. This survey identified the women who experienced obstetric complication(s) and we interviewed 120 such women selected through maximum variation sampling.

### **Findings:**

1. Availability and utilisation of EmOC specialists: Of the 44 public facilities studied 20(45%) have a qualified obstetrician(s), 13(30%) have a qualified anaesthetist(s) while 77% do not have either/ both of these specialists. The utilisation of the specialist skills of the serving obstetricians is low – the 25 obstetricians working at sub district level performed 34 Caesarean sections during 6 months.
2. Distribution of specialists: The number of obstetricians working in the private sector in these districts translates to an availability of 1/23,000 population in Amravati, 1/21,000 in Satara and 1/48,000 in Nandurbar district. These figures for the public sector are 1/325,000, 1/187,000 and 1/163,000 population respectively. Fifty percent of the 260 private obstetricians in the study district work in rural areas. Our findings contradict the assumption that there is an overall shortage of obstetricians. The interviews with private specialists brought forward their concerns in rendering services in public facilities.
3. Contracting-in private specialists: For 50% of the public facilities with potential for contracting in specialist, the nearest private specialist is located at more than 30 Km



(Range 30-100Km). Contracting in has been undertaken at 7 facilities and these are mostly places where the private specialist is located in the same town. Though contracting in has provided specialists for fixed duration it has not influenced the provision of obstetric services in emergencies.

The interviews with the private specialists revealed their expectations and those with administrators and managers brought forward the operational issues in executing the contracting in strategy.

- 4 Task Shifting: We met the 2 graduate medical officers trained in CEMOC services and the 3 others trained in LSAS. None of these have independently conducted a Caesarean section (CS) or have administered anaesthesia for it. Interviews with these providers revealed the reasons for non-performance.
- 5 Effect of unavailability of Caesarean section in public facilities: Our community level survey shows that 8% of the women had undergone a CS and 57% of these surgeries were in the private sector. The cost incurred for CS in the private sector ranges from Rs.10,000- 30,000. In absence of CS services at 80 % of the CHCs, the next public facility with these services is located more than 60 Km for 50 % non functional CHCs.

### **Discussion:**

We discuss the appropriateness of initiatives for addressing specialist shortage in states like Maharashtra that have a relatively higher concentration of specialists and the limitations of contracting in and task shifting strategies. We highlight the neglect towards providing the required working environment for these cadres. Aiming for a sustainable solution, we recommend the areas for essential changes in human resource policies to attract and retain specialists in the system.



# Which Doctor For Primary Health Care? An Assessment of Task Shifting Among Primary Care Clinicians

*Author(s): Krishna D. Rao, T. Sundararaman, Peter Berman, Kamlesh Jain, Aarushi Bhatnagar, Neha Kumra*

## **Introduction:**

Shifting of clinical functions to non-physicians can be a cost-effective way to expand primary health services. Where physicians are scarce, shifting tasks to these non-physician clinicians offer an important way to continue services. The scarcity of qualified physicians in rural India is a critical issue for increasing access to health services and achieving universal health care; many rural Indians rely on unqualified clinicians because of this scarcity. Though several types of non-physician clinicians provide primary health care in India, their performance is much debated.

This paper examines the performance of non-physician clinicians at primary health centers (PHC) on several dimensions; clinical competence, patient satisfaction and how communities perceive them.

## **Methodology:**

This study was carried out in Chhattisgarh state in 2009. In addition to Medical Officers (i.e. physicians), several types of non-physician clinicians serve at PHCs in the state - clinicians with three years training (Rural Medical Assistant (RMA)); AYUSH Medical Officers, trained in Indian systems of medicine; and paramedical staff (pharmacists and nurses). PHCs were stratified into these four groups. 40 PHCs were randomly selected in each group. Clinical vignettes were used to measure technical competency in managing infectious, chronic and maternal conditions. Patient and community perception was measured using Likert type scales. Group differences were tested for statistical significance after controlling for individual and contextual factors.

**Findings:**

Clinician technical competency was low. Medical Officers and RMAs were the most competent, followed by AYUSH Medical Officers and Para-medicals. Patient satisfaction and quality perception scores were similar for Medical Officers, AYUSH Medical Officers and RMAs. Para-medicals had the lowest scores. Communities perceived Medical Officers, RMAs and AYUSH Medical Officers as capable of treating common illnesses but only Medical Officers for treating serious conditions. Para-medicals were perceived as being incapable of treating either condition.

**Discussion:**

Clinicians with shorter duration of training, like RMAs, appear to be competent providers of primary health care. They can be used to efficiently expand primary health services, particularly when physicians are scarce, to achieve universal health care. AYUSH physicians and paramedical staff also have this potential, but require further training. Overall, there is an urgent need to improve the technical quality of PHC clinicians.

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**Equipping Missionaries for the Mission:  
Case study of the Capacity Building  
Initiatives by Public Health Resource  
Network and the Decentralised Health  
Planning under NRHM in Jharkhand  
State, India**

*Author(s): Suranjeen Prasad, Raman V. R., Haldhar Mahto, Rajan Kumar, Dinesh Jagtap, Shampa Roy, Alexander Kerketta*

**Introduction:**

Most of the Jharkhand districts were unable to do district health planning and to initiate action, beyond preparing an initial prospective planning document in 2006, with



external support. Lack of internal capacities in analyse the situation, and in envisaging/presenting the strategies and budgets was seen as the key impediment behind this. The Public Health Resource Network (PHRN) developed a training curriculum and a fast track capacity building programme in 2006 to address this gap, in partnership with NHSRC at national level. Jharkhand State Rural Health Mission adopted this and trained select officials from all districts in several batches and rounds since 2008. Concerned social workers from various civil society organisations were trained on district health planning, under a parallel distance learning programme by PHRN. These trained personnel from both health department (n=155) and civil society groups(n=85) supported the district programme management unit in preparing district health action plan, under a special effort during November 2009 to March 2010. All districts were able to prepare and submit their District Health Action Plan documents on their own for the first time under this, with limited guidance and appraisal inputs from experts at the state level. Most of the contents of these plans were incorporated in the State Project implementation Plan for 2010-11 as well. District planning process for year 2011-12 has already been initiated under the same strategy.

This study was done in order to assess the significance of the PHRN led capacity building in enhancing the individual and institutional technical capacities at the district level, and to look at how those capacities enhanced the district level planning and management of health service deliveries under NRHM. Reflection of the training inputs in quality of district health plans was also to be looked at.

### **Methodology:**

Case Study method, through desk review of reports, review of district health plan documents, FGDs with district teams, interviews with stakeholders.

**Findings:**

1. At least 10 out of 24 districts have developed in-house capacities to take forward the health planning processes, as result of the capacity building.
2. Having the planning capacities at district itself has created a felt need and enthusiasm for an organic process for decentralised planning; replacing the notion that it is a pushed compulsion under NRHM norms.
3. Situation analysis and planning was done better in those districts wherever the selection of personnel for the training was done carefully.
4. Most of the processes for the planning were found followed well in those districts where civil society personnel were involved in the planning processes.
5. After achieving the hands-on experience of preparing the district health plan, most of the districts seem to have gained confidence and competencies in taking the DHAP processes forward.
6. The scope for block and village health plans has also been enhanced by this process.
7. Focus has come on inclusive planning and health equity, through special plans for vulnerable areas and groups.

**Discussion:**

- Need for a structured capacity building and competent district team for planning and management of public health systems.
- Selection of right personnel for such capacity building inputs.
- When over half of the mission period is spent on capacity building and still there are gaps especially in needy areas, when to achieve mission goals?
- How to institutionalise and maintain continuum of planning and link it with action?
- Need of ensuring local resource allocation based on the needs indicated by the district health plans. In absence of this, the enthusiasm created by the capacity building initiatives may diminish.

- The current NRHM structure looks forward for annual planning, but the resource allocation starts only from mid-year, hence the need of a medium term approach and funding commitment.

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## **Strengthening Support Mechanisms for Performance Improvement of ASHAs**

*Author(s); Dharmendra S. Panwar, Emily Das, Vandana Naidu, Madhuri Narayanan, George Philip*

### **Introduction:**

ASHAs have undergone several rounds of induction training and received additional training like the 10 day training on Child Survival in Uttar Pradesh. However, despite these trainings significant gaps remain in ASHA performance and their ability to take "knowledge to practice".

Recognizing that improving performance of ASHAs is critical to achieving NRHM outcomes, USAID-funded Vistaar Project, as part of technical assistance to the Government of Uttar Pradesh, planned assessments to identify (i) Gaps between the desired and actual performance of ASHAs (ii) Key factors affecting her performance and (iii) On-the-job support and capacity building needs for ASHAs to strengthen ASHA mentoring

### **Methodology:**

The assessment: Qualitative assessments: Rapid Needs Assessment (RNA) and Performance Needs Assessment (PNA) comprising of FGDs and IDIs with ASHAs, ANMs, LHVs and Medical Officers conducted across 5 districts of Uttar Pradesh.

Systematic random sampling was applied to select ASHAs using list of trained ASHAs provided by the district governments as the sampling frame. ANMs, LHVs and MOs corresponding to the ASHAs selected were



interviewed to assess the existing supportive supervision mechanisms for ASHA. Content analysis of the qualitative data from IDIs was carried out using N6 software package. Two PNAs, with about 40 participants each, which included ASHAs, ANMs LHV and Medical Supervisors, were undertaken at two different locations. This included finding performance gaps between desired and actual performance, undertaking root cause analysis to identify underlying factors and action planning to address the root causes at various levels.

The intervention TheVistaar Project provided technical assistance in five districts of Uttar Pradesh to regularize monthly ASHA meetings and use these as platforms for on-going capacity-building of ASHAs to enhance their skills for effective transformation of knowledge to practice. The intervention was taken up at scale involving over 10,000 ASHAs. Vistaar designed capacity-building modules on Supportive Supervision and assisted government with training of ANMs and LHVs in 5 districts to provide on-site support to ASHAs during field interactions. ANMs were trained to provide problem solving / action planning support, provide positive feedback and encouragement and build motivation of ASHA in a non-authoritarian way.

### **Findings:**

From the assessment:

- ASHAs possess basic theoretical knowledge, however, significant gaps remain in application of this knowledge with ASHAs lacking operational skills to translate knowledge to practice
- ASHAs lack inter-personal communication (IPC) skills required to communicate effectively and negotiate behaviour change at household level.
- Post-training mentoring support required to periodically update knowledge and enhance skills of ASHAs is lacking.
- Forums like the ASHA monthly meetings remain unutilized for on-the job capacity building and supportive supervision for ASHAs

- Village Health & Nutrition Days (VHND) are missed opportunities for field interaction between ASHA and ANM and providing on-site support to ASHAs

#### **Following intervention:**

- ASHA meetings that included capacity building sessions increased from 53% (Jul-Sept 09) to 98%
- ASHA attendance at monthly meetings improved significantly from 48% (Jul-Sept 09) to 82% (Apr-Jun 09)<sup>1</sup>
- Proportion of recently delivered women visited by ASHAs who reported use of job-aides by ASHAs increased from 10% (Oct-Dec 09) to 22% (Apr-Jun 10)<sup>1</sup>
- Proportion of recently delivered women who reported being counseled on early initiation of breastfeeding increased from 64% (Oct-Dec 09) to 77% (Apr-Jun 10)<sup>1</sup>
- Proportion of mothers visited by ASHAs at least once within 3 days of birth increased from 0.6 % (Jan 2009) to 35% (July 2010)<sup>2</sup>

*Source: (1) The Vistaar Project MIS Data collected from Azamgarh, Banda, Bulandshahr, Saharanpur and Varanasi*

*(2) Baseline survey and Rapid assessment conducted in Jan 2009 and July 2010 respectively.*

#### **Discussion:**

- Supportive supervision (including capacity-building) of ASHAs can be strengthened through the existing Government system, by using the regular monthly meetings more effectively.
- Strengthening ASHA meetings and creating opportunities for ASHAs to meet in smaller groups rather than the typical large group environment makes meetings more effective and interactive.
- Presence of ANMs in meetings along with ASHAs from their sub-centre area promotes team-building, provides opportunity for joint problem-solving and follow-up support during field-visits
- Use of monthly meetings for capacity building reduces the disruption of routine work (compared to standalone training sessions).

- Village Health & Nutrition Days provide opportunity to ANMs for provision of on-site support to ASHAs.

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## Functioning and Utilisation of Accredited Social Health Activist for Pregnancy-related Services - District Rudraprayag, Uttarakhand, India, 2010

*Author(s): Amit Shukla, T. Bhatnagar*

### **Introduction:**

Accredited Social Health Activist (ASHA) is a key link to public health services in villages in India. We conducted a cross-sectional study to estimate the proportion of women utilizing ASHA for pregnancy-related services, estimate the prevalence of the knowledge, attitude, practices, hindrances and motivation factors among ASHAs and determine the factors associated with the utilisation of ASHAs for pregnancy-related services.

### **Methodology:**

Using cluster sampling for the women (18-45 year age group), who delivered in past one year we calculated the sample size of 240 based on 9% prevalence of ASHA use for ANC services, 1.9 design effect, 95% confidence interval and cluster size of 10. We selected 24 revenue villages as clusters with probability proportion to size of number of women in reproductive age group in rural parts of district Rudraprayag. From each cluster we selected 10 eligible women from consecutive households and all the ASHAs (24) working there. Using pre-coded questionnaire in Hindi trained field workers collected information on the socio-demographic and utilisation characteristics of ASHA services for eligible women along with the socio-demographic characteristics and training, knowledge, practises, community acceptance, hindrances and motivational factors for ASHAs. We used multivariate logistic regression to identify the characteristics of both the



eligible women and ASHAs that were independently associated with the utilisation of ASHAs for pregnancy-related services. We calculated the odds ratios and 95% confidence intervals separately for antenatal care (ANC), delivery-related and postnatal care (PNC) services.

### **Results:**

Among 188 (out of 240) women who had heard about ASHA, 69.7%, 58.5% and 53.7% took their help for ANC, delivery-related and PNC services, respectively. Among the 24 ASHAs, 22 (91%) reported escorting pregnant women for services, 13 (54.2%) had knowledge of being appointed by the panchayat, 19 (79.2%) reported spreading health awareness as one of their job responsibilities, and 15 (62%) reported participating in sit-in protest. 7 (29%) ASHAs did not have community support for their work as ASHA, 18 (75%) ASHAs reported lack of facilities for institutional delivery as hindrance to their work and 12 (50%) reported helping the needy as the major motivation factor for their work. Utilisation of ASHA for all services was significantly more among women with ASHA as source of Janani Suraksha Yojana information and motivation for registration, receiving free medicines from ASHA, ASHA with longer work experience and training, and more ASHAs in village. Place of delivery and attending Village Health and Nutrition Day (VHND) were significantly associated with utilisation of ASHA for both delivery and PNC - services. Education status of women and ASHA, issues discussed in VHND and distance to health facility were significantly associated with utilisation of ASHA for ANC, delivery and PNC services, respectively.

### **Discussions:**

Utilisation of ASHA for ANC was high but lower for delivery-related and PNC services. ASHAs have optimal knowledge of expected work and are the major source of information and support for pregnancy-related services. Reinforcement of expected work among ASHAs will improve their utilisation for all services.

# What do Doctors Want? Incentives to increase rural recruitment and retention in India

*Author(s): Seema Murthy, Krishna Rao, Sudha Ramani, Maulik Chokshi, Neha Khandpur, Indrajit Hazarika*

## **Introduction:**

"The non-availability of critical human resources continues to be an even larger challenge for which there are no easy solutions" – declared Sh. Ghulam Nabi Azad, Minister Health & Family Welfare on the occasion of '5 Years of NRHM'. Increasing human resources in rural areas is identified as a key priority area in NRHM.

The distribution of doctors is highly skewed towards urban areas. Moreover most doctors are employed in the private sector while large vacancies persist in the public sector, particularly in rural posts. Even as NRHM has ambitious plans to strengthen rural health services through 24X7 PHCs, First Referral Units and the Indian Public Health Standards, the difficulties States experience in staffing rural health centers threatens to undermine this important effort.

This study attempts to systematically examine what the doctors expect in order to work in rural area. It examines the career preferences of both medical students and Medical Officers at PHCs to identify which incentives would attract and retain them in rural postings. This will better inform current policies and practices to recruit and retain doctors in rural areas of India.

## **Methods:**

This qualitative study included a total of 68 (23 interns, 19 PG students and 26 in-service doctors) interviews using a semi structured interviews, from Andhra Pradesh (AP) and Uttarakhand (UK).

All interviews were recorded and transcribed. Stated job attributes were clustered into three broad categories-

individual, organizational and contextual attributes. An iterative process was used and then finalized by taking group consensus. Each attribute is further rated on strength, based on the frequency and force with which the attribute was referred to.

To get the policy perspective, key policy makers at the state and central level were interviewed. The policy makers were asked about the feasibility of bringing about the changes that the doctors were expecting and the attributes were ranked accordingly.

### **Findings:**

Expectedly, a high salary was a strong incentive- some wanted double the current pay or parity with private sector. However salary was not sufficient.

Lack of infrastructure in treating patients was demotivating for many. "What was happening was, we were just looking at the cases and referring them. That was the only thing we were doing". For students, lack of learning opportunities featured prominently. Importantly, the reservation system for post-graduation, for working in rural areas was attractive to both.

Lack of good education facilities in rural areas for children was a big deterrent. Security, living facilities, connectivity and proximity to family were other prominent features. Political interference was feared and detested by many students and medical officers. The poor image of a rural doctor made students view it as only a stepping stone for a postgraduate seat. Better management, clear cut transfer and increased leave were important for doctors.

The key policy makers felt that salary could not be easily changed although monetary incentives for rural service could be increased. Improving health center infrastructure, in-service learning opportunities and improvement of living facilities were considered feasible. Better management, transfer and leave policies were regarded as not very actionable. They also said that factors like



children's education, connectivity, security were not actionable since it fell outside the purview of the health department.

### **Discussion:**

The results of this study suggest that simple solutions like increasing salary will not greatly help in recruiting or retaining doctors in rural posts. Since several factors influence where doctors choose to work, what is needed is a 'package' of incentives. Elements of this package would need to include better salary, post-graduate educational opportunities, better equipped and supplied health facilities, improved living conditions, and clear-cut transfer policies.

It was interesting to see that some critical issues like better management and clear cut transfer policies were considered to be 'touch me not' issues because of the political considerations. Yet, all of these are important for improving rural recruitment and retention of doctors. NRHM can help addressing the gaps between what the policy makers felt was feasible and what doctors expected. For India to achieve universal health care, bold human resource policies are required to address rural doctor shortages.



## **PG Reservation for in-service doctors in Andra Pradesh: a case study**

*Author(s): Seema Murthy, Zubin Shroff, Krishna Rao*

### **Introduction:**

The need to attract and retain health workers in rural areas is imperative to the achievement of health for all. The crisis of human resources in the health sector in India has been recognized and given priority under the National Rural Health Mission.

States around the country from Tamil Nadu to Uttarakhand have adopted various strategies to attract and retain skilled health workers in rural areas. These include monetary incentives in the form of additional payments for serving in rural areas as well as non monetary incentives. Since the majority of MBBS doctors aspire to specialize, using incentives that allow for easier admission or entry into PG programs appear to be a logical step towards attracting fresh graduates to serve in rural areas. However, there are a number of nuances in the design and functioning of schemes using this incentive that need to be explored.

This case study examines one such strategy used by the state of Andhra Pradesh. 50% of PG seats for pre and para-clinical subjects and 30% of seats in clinical specialties in the state are reserved for candidates who have served in the government. The number of years of service required to avail of this quota is 2 years for tribal areas, 3 years for rural areas or 5 years in urban areas.

### **Methods:**

The case study methodology was used. A large number of stakeholders were interviewed. These included health department officials, final year MBBS students, interns as well as PG students.

Data was obtained on the number of candidates appearing for the AP PG exam over the years (both in the general category as well as in-service quota) as well as the number of MBBS graduates passing out from medical colleges across the state over the past few years. In addition we obtained information on the performance of both general and in-service candidates in the final year PG examination.

### **Findings:**

Discussions confirmed the prevailing view that a PG seat is the most attractive incentive for fresh medical graduates. Using the in-service quota sharply increases the probability of getting a PG seat. Also, over time the

number of people using the quota has increased, this is probably a reflection of the increasing difficulty of entry into PG in the general category.

Regarding opinions about this scheme, PG students are divided. Those admitted to PG using the quota felt that it addressed the HRH problem in the state and made their admission easier. Others raised questions about the academic caliber of in-service candidates, many of whom have been working for years at the PHC level. Government officials were on the whole positive about the scheme, though some did question the performance of medical graduates who were in rural areas solely for a PG seat as well as the academic ability of some of the in-service candidates.

#### **Discussion:**

If the number of vacancies filled is the benchmark, the strategy of reserving PG seats for doctors serving in rural areas appears to be very successful. However, it is important to ask whether using MBBS graduates, whose sole interest, in many cases is getting a PG seat, is a good strategy to provide care in these areas.

Mentorship and training while working in the PHC, to counter the perception that years worked in PHCs are 'wasted' is essential. Improved infrastructure and working conditions are needed. During the period of rural service it is important to encourage academic interests in rural health problems to develop among doctors.

In addition, assigning doctors to serve in districts where they hail from or districts of family origin might allow for a durable bond to form with the community they serve.

Finally, there is a need to rationalize the scheme; the government should focus on training doctors in those specialties for which there is a demand within the public system. This has come to the notice of the health department which has made recommendations regarding this overdue change.



# What attracts health workers to rural areas? Refining human resource strategies under NRHM

*Author(s): Sudha Ramani, Krisha Rao, Maulik Chokshi, Neha Khandpur, Seema Murthy*

## **Introduction:**

Under the National Rural Health Mission (NRHM), various strategies are being implemented to improve the numerical adequacy and skills of health workforce in rural areas of India. These include contractual appointments, training, educational incentives, monetary compensation for rural service and extensive involvement of health workers other than allopathic doctors (AYUSH doctors, RMPs, and ASHAs). The NRHM framework clearly favors task-shifting; however, in practice, the inclusion of RMPs is still clouded in political debates, the quality of AYUSH is debated and nurses have not yet gained a forceful policy entry. Within the human resource framework, there appears to be a constant tug-of-war between "Which health worker is needed in rural areas?" and "Who can be got there?"

While the framework emphasizes on the need to create the right incentive climate to enable key public sector health workers to take up rural postings, there is currently little evidence on what combination of incentives work. Also, most incentive schemes target allopathic doctors; our understanding of the concerns of other cadres like AYUSH doctors and nurses is insufficient.

This study focuses on understanding the determinants of employment choice in rural areas among allopathic doctors, AYUSH doctors and nurses in India. It arrives at a comparative framework of determinants from which lessons can be drawn for refining human resource strategies and the incentive structure for rural service under NRHM.

**Methods:**

This qualitative study has been conducted in the states of Andhra Pradesh (AP) and Uttarakhand (UK). Medical, nursing and AYUSH schools were purposively sampled to represent a diversity of academic reputation, and provide a mix of both public and private institutes. In each district, in which the sampled medical college was situated, PHCs were purposively selected and doctors (MBBS, AYUSH) and nurses from the PHCs were also interviewed.

A total of 80 in-depth interviews were conducted with a variety of participants- medical students (undergraduate, post graduate and alternate medicine), nursing students, and doctors and nurses in rural posts. All interviews were recorded and transcribed. Data was coded, and has been clustered by constructing matrixes through an iterative process, as per qualitative data display techniques.

**Findings:**

A generic framework has been developed that clusters attributes considered important by healthcare into three categories- individual attributes (age, sex, and intrinsic motivation), organizational attributes (salary, work facilities, career development and policies) and contextual attributes (living facilities, children's development, and family's comfort).

Within this framework, many attributes were commonly cited by all categories of respondents. While financial and personal development incentives were considered important; these were not adequate to attract health workers to rural settings. Frustration among rural health workers often stemmed from the lack of infrastructure, support-staff and drugs. This was exasperated by local political interference and lack of security.

We observed some differences in the way a government primary-care job was perceived by the respondents. For most allopathic doctors, a primary care job commanded little respect- it was perceived as a job in a "smelly...no

desk...broken chair" place, taken up only by doctors with no urban option. However, for many nurses and AYUSH doctors, a government job had high social stature and implied job security.

### **Discussion:**

What was considered "rural" by one category of workers was not necessarily reflected in the opinion of others. In general, AYUSH doctors and nurses were more amenable to government service in rural areas. While they may prove to be valuable health resource in underserved locations, de-motivation in these cadres often stemmed from poor respect, lower payments than regular staff and power misuse by authorities during contract renewal. Many of these issues pertained to the refinement of contracting mechanisms under the NRHM.

The public sector in India has instituted several mechanisms, pecuniary and non-pecuniary, to attract doctors to rural areas. However, these mechanisms tend to focus on singular issues (such as increasing salary). Our multi-factorial framework suggests that it is imperative to replace the isolated-incentive approach by a "package" approach.





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# **Stewardship and Governance**



# Exploring perceptions and Functioning of Rogi Kalyan Samiti in selected districts of West Bengal: Emphasizing on Maternal and Child Health Services

*Author(s): Nupur Basu Das, Jaydeep Sengupta*

## **Introduction:**

The growing countrywide initiative in making every RKS of the public health facility centers functional has formed the basis of CINI's present study.

RKS as an important feature of NRHM is conceptualized to deliver quality health services through public health facility centers at all levels from state downwards. By drawing representation from wide number of stakeholders including health service providers, local authority and public representatives RKS makes health a matter of common responsibility. However, from field observations and reported evidences it was found that in many places of West Bengal (where RKS has formed since 2006) RKSs are functioning with various difficulties. The present exercise for rapid assessment of functioning of selected RKS is done with reference to the MCH services, since they mark basic services within the community. In the overwhelming initiative of the state to deploy huge number of frontline health volunteers for generating demand for health services it has become necessary to closely see if the service facility points are prepared for prompt delivery of quality services. Thus RKS, as the managerial unit in these facility centers, has a major responsibility to improve maternal and child health condition. However, studies that are available on RKS are too less in comparison to the growing importance of RKS. The present study is an unprecedented approach in the context of West Bengal.

It has the following objectives to understand and identify:

- Functioning of RKS with reference to MCH services
- Perceptions of RKS members about RKS



- Perceptions of users regarding importance of RKS in delivering health services
- Various constraints faced by RKS

### **Methodology:**

This is a cross-sectional descriptive study done in three districts of the state, viz. Nadia, Birbhum and Uttar Dinajpur considering institutional delivery as the reference point for this selection. While Birbhum was close to the state average, Nadia was higher and U.Dinajpur, lower. Similarly, 3 blocks from each of the districts were purposively selected under the same criteria. Enquiry was made to the functioning of RKS at the level of BPHC and one PHC under each selected BPHCs<sup>1</sup>, according to the feasibility in covering within the duration of six months. The study thus draws information primarily from 9 health service points. Data from the District Hospitals served as a means of verification of the study findings.

Considering the small sample size, the study does not claim to be a quantitatively representative; rather it is a qualitative investigation commensurate with the explorative nature of the study. Primary data was gathered through semi-structured interview with the available RKS members, followed by FGD with community members who utilized MCH service within a fixed reference period. Besides, service facilities were assessed at the studied points by non-participant observation against a standard checklist. In addition, analysis of the minutes of the RKS meetings and the financial statement within a reference period provided other necessary information.

### **Findings:**

By and large it was observed that RKS members could not specify their individual roles though most of them opined in favor of RKS. The signatories had better knowledge of the fund expenditure in comparison to other members who solely depended on the directives of the signatories. In many places RKS meetings are merged with the Block H&FW Samiti meetings considering the commonality in

the member participants and agenda of discussion, the latter being solely restricted within fund utilization for infrastructure development. As a result, meetings ended without representation and knowledge of the NGO member. Other gaps that emerged from the study were the irregular participation of the PRI representative, medical officers in need of managerial support for making equitable expenses for service improvement and scanty attention being paid towards user grievances. On the other-hand users, particularly mothers have expressed dissatisfaction regarding the service provisions to varied extent.

### **Discussion:**

The study comes up with major need for capacity development of RKS members particularly BMOHs and MO-PHCs on health management and advocating for active participation of NGOs in RKS to bring up community needs at the forum. Besides, there is a regular need to orient the stakeholders about RKS and encourage community to utilize benefits of RKS.

The study ends with few instances of promising endeavors at places to reflect a strong collaborative effort of stakeholders and users for betterment of services. Interestingly these places also have satisfactory records of institutional delivery making assertion that strengthening of RKS has a positive implication of improvement of MCH services.

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<sup>1</sup> In West Bengal RKS is constituted at the level of PHC also. Though deliveries are rarely conducted in PHC yet it has a sole responsibility to deliver MCH services including referral.



# Impact of functional VHSCs on maternal health and the delivery of antenatal and postnatal health care by ANMs in Mayurbhanj district of Odisha

*Author(s): Jiban K. Behera, Sunita Singh*

## **Introduction:**

The National Rural Health Mission (NRHM) was launched in April 2005 with a view to bring about dramatic improvement in the health system and health status of the people in the country. The mission seeks to provide universal access to equitable, affordable and quality health care to the people and especially the poor and the vulnerable sections of community residing in the rural areas throughout the country.

NRHM wants to achieve its goal through some key strategies. One of the key strategies is to involve Panchayat Raj Institution members (PRI) to own, control and manage public health services. In this context Community participation was an important factor and was given due importance to ensure service guarantee and the services available in the health sector. The community participation also ensured by involving community from the bottom up planning and monitoring. Under this process the Village Health and Sanitation Committees (VHSCs) in the village level are being formed in many places. The VHSCs are given importance because earlier plans were made at top level and were implemented in the grassroot. The NRHM ensures capacity building and training of the members of VHSCs.

This paper deals with how functional VHSCs are associated with running of regular fixed health day, delivery of maternal health services and monthly visits of Auxiliary Nurse Midwives (ANM) and performance of their stipulated duties under NRHM. An attempt has been made under the study to observe those villages which have



functional VHSC (which are activated and formed under Community Monitoring process) and those which have no VHSC. Under these VHSCs delivery of maternal health services, running of fix health day and functioning of ANMs have been observed. The study has observed total seven functional VHSCs and seven village without VHSCs for this purpose.

### **Methodology:**

The study was conducted in Bangriposi block of Mayurbhanj district of Odisha. 7 villages where VHSCs are already in function and 7 villages where there is no VHSCs were taken for the purpose of the study. The selection of villages was done by scoring methods. Following stakeholders were covered under the study; Village Health and Sanitation Committees, ASHA, AWW, ANM, Mothers (who delivered three months preceding the interview), SHG groups, opinion leaders and CBOs where VHSCs yet to be formed. The structured questionnaire was developed in order to record the responses. For fix health day observation sheet was developed.

### **Findings:**

The findings of the study shows that women in functional VHSCs are 7 times more likely to get antenatal services, 5.83 times natal care, 5.61 post natal care and 6.18 times neonatal in comparison of non VHSC villages. The results shows that services by the ANM has increased substantially in the functional VHSCs villages. The presence of village level functionaries are uniform in but the presence of PRI, SHG and VHSC members are more in functional VHSCs villages. The non VHSC village had no post natal and neonatal services. Mothers/women in functional VHSC received counselling where in non VHSC there was no counselling provided to them. Running of village health day was regular in functional VHSCs in comparison to non VHSC villages.

### **Discussion:**

The goal of the study was to learn about the changes in

pattern of service delivery of Auxiliary Nursing Midwives (ANM) of functional VHSCs under Community Monitoring. The study clearly indicates that VHSCs those have been activated and formed during community monitoring project have significant impact on its functioning and delivery of the stipulated services during fix health day. The services that need to be made available to the women as per the guidelines provided by NRHM is not happening in non functional VHSCs. The study has found sharp rise in delivery of post natal services and counselling. Thus the study recommends that the all VHSCs need to be made active and get involved in community monitoring process for better service delivery by ANM.

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## **Community based monitoring as an accountability tool and related trends of change and improvements in the rural health services in the state of Maharashtra**

*Author(s): Dr. Dhananjay Kakade*

### **Introduction:**

Introduction of comprehensive framework for Community Based Monitoring (CBM) and planning at various levels of the public health system has been one of the most significant policy initiatives under NRHM. One of the key considerations while introducing this large scale social experiment was to fill the accountability deficit of the public health system by involving local communities. The author examines how CBM has contributed to improvements of local health services and also touches upon some limitations of CBM.

### **Methodology:**

At the core of CBM is the act of tracking, recording and reporting the state of public health services in villages, as experienced by the people themselves. In each monitoring

cycle, at the village level information is collected about the outreach and the Primary Health Center (PHC) services in group discussions, involving community members with emphasis on participation of women and other marginalized groups. Community responses are recorded in a form of rating each service as good, partly satisfactory or bad. Information collected through this process is presented in a concise form as a pictorial report card clearly reflecting availability, regularity and quality of health services. The report cards marked health services using 11 indicators, all indicators based on a three month recall period. Findings from these report cards were presented in the officially mandated Public Hearings. Compiled data from different districts, reflecting the overall situation of health services, is presented to the higher State level health officials in the State level public dialogue, for further remedial actions.

### **Findings:**

In the 220 villages spread over five pilot districts, the first, second and third rounds of CBM data collection took place between July 2008 to December 2009. At the beginning of CBM process, villages rated their health services 'good' at an average rate of 48%. This has increased by 13 percentage points to 61% in round two, and by round three it increased by an additional 5 points to 66%. The average percentage of services rated 'bad' by villages decreased from 25% to 16% to 14% over three cycles of monitoring.

Specific indicators like immunisation improved by 21 percentage points from 69% 'good' in round one to 90% 'good' in round three. Between rounds one and three Anganwadi services and use of untied funds improved by 33 and 31 percentage points respectively. Regarding the PHC health services (like 24 hr delivery care, indoor care, laboratory and ambulance services etc) significant improvement from 32% in the first round to 74% in round three took place.

While many aspects of the village health services have



improved, services like Disease surveillance, village level curative services are showing inadequate improvement or stagnation. Status of these health services remained below 50% even after third round of CBM data collection. Disease surveillance shows improvement of only 9%, from 41% in first round to 50% in third round. Village level curative services show stagnation from 40% in first round to 42% in third round.

Besides quantitative improvements wide range of qualitative improvements also took place in the areas where CBM is presently underway.

#### **Discussion:**

The large number of positive improvements witnessed over last three years is due to a combination of NRHM 'supply side' input and 'demand side' push by the CBM. However CBM would not be able to address systemic and structural issues if as an accountability principle, it is not accepted at all levels of governance of the public health system. In absence of such acceptance it would remain confined to the periphery of the public health system, like the outreach and PHC services. Though there seems to be a growing acceptance among Health officials that community led action in form of CBM is integral to NRHM, it certainly requires much stronger reinforcement. Equally importantly, critical findings from CBM should not become a vehicle for weakening the public health system, or to push the privatization agenda.

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### **Governance strategies and public services to improve health- Use of the Right to information Act to access better services- experience in two urban slums**

*Author(s): Rajarajeshwari, Sowmya Bharadwaj D.V..  
Ramamurthy K.V.*

**Introduction:**

In the context of inflationary trends and the incapacity of the poor to access services in open markets, the Government of India has initiated various programmes to provide vital basic facilities either free or at nominal cost. However, these services are not reaching the most vulnerable people due to a lack of awareness, barriers in accessibility and rampant corruption in the system. The failure in basic service delivery has impacted the health and economy of the poor, especially in an urban scenario such as Bangalore. The urban poor are unable to access food grains in the open market, which prevents them from attaining the minimum required nutrition, and makes them vulnerable to health disorders. A similar situation exists in health services. It is necessary to build pressure to improve accessibility for public services - especially Public Distribution System, Primary Health Centers, and Anganwadis to improve health in urban areas. In Bangalore, though there are various service points to provide services on health and PDS, the quality of the service delivery at the service points are not assessed. Most of the time, these service points don't work as per norms such as working hours, availability of allocated supplies to that service point, and appropriate service delivery methods, leading to a failure of the realization of the whole entitlement reserved for the needy.

**Methodology**

As part of its work in urban governance reforms with a pro-poor orientation, CIVIC undertook a rights-based approach in two selected slums of Bangalore to address a few major services that were provided to the poor under subsidy or for free, namely, food and health. The methods include;

1. Empower the community to access service:
  - a. Build a comprehensive database on selected slums to benchmark status. Track progress with time.
  - b. Form people's committees at the slum level and develop capacity to understand essential, social

rights and empower them to access services that rightfully belong to them.

2. Push governance reforms in specific departments using Right to Information (RTI):
  - c. Dialogue with service agencies to develop charters (through 4.1.b.4 of RTI Act) and enhance delivery of services through improving/developing platforms such as grievance redressal meetings, which set these mechanisms for the dept/agency.
  - d. Create pressure for transparency in service delivery through budget tracking and public hearings.
  - e. Push accountability in service delivery by employing tools such as MPIC, disclosure of Job Charts and creating/strengthening platforms such as Vigilance Committees.

## **Results:**

Major achievements using RTI as a tool:

### **A. HEALTH:**

1. Establishment of Anganwadi Centers in two slums.
  - Improvement of food provision in Anganwadi Centers for children and pregnant and lactating women
  - Increased Bhagya Lakshmi beneficiaries
  - Health check-ups for women and children
  - Local employment in the anganwadi centers
2. Regular visits by the ANM/LHV from the Sub Center, for the first time in eight years.
3. Greater coordination between the Anganwadi Center and Sub-Center.
4. Increased awareness on services and schemes in the communities

### **B. PDS:**

1. More confidence in the community to demand rights.
2. Altered attitude of PDS shop owners, with a willingness to increase the frequency and working hours of shop.



3. Beneficiaries report increase in the quantity of rations distributed in accordance with the rules, thus decreasing the burden experienced by a BPL family.
4. Eligible families without BPL cards have applied for them.
5. Collection and collation through RTI of several Government Orders (GOs) including directive from the Department of Personnel and Administrative Reforms (DPAR) on Grievance Mechanisms, and sharing these with the public.
6. Based on these GOs, CIVIC along with the community was able to demand and organize GRMS at the slum level regularly to address the problems faced in PDS system.
7. By submitting the GRM proceeding reports and appropriate following up with RTI, officials were more willing to abide by their assurances and follow norms and procedures.

### **Discussion:**

To bring changes in delivery of basic services such as health and PDS, a multifaceted approach was adopted with awareness on entitlements as a basis. CIVIC faced many challenges in obtaining cooperation from the service agencies in accessing information on the details of entitlements of the poor for specific service points. RTI is a key tool, through which it was possible to bring high level of change in the two urban slums. Other tools such as citizens' charters, GRMS systems, and government orders were also needed. Implications, strategies and barriers for changing service delivery to access better services and enhance the health status of urban poor will be discussed in the presentation.



# **Policy objectives are not enough to reach the poor in urban health project in Bangladesh; Systemic monitoring is essential**

*Author(s): Kamal Biswas, M. Kabir, A.B.Sidique, Sharmin Mizan*

## **Introduction:**

Second Urban Primary Health Care Project (UPHCP II) in Bangladesh started in 2005 with a mandate for reaching every component of services to at least 30% of the poor in catchments area. According to project strategy the poor were selected through household survey and identified with free service entitlement cards by the service delivery partners. Project started service delivery in partnership with contracted NGOs in 2005. The Project maintains a robust Health Management Information System with web based data uploaded by the provider NGOs. The project employed a third party for monitoring service delivery with the pre set indicators including service to the poor population. The project monitoring and evaluation started later in 2007. There was a gap in reaching the poverty based targets. HMIS data was analyzed with particular case of institutional delivery to assess the situation of coverage of the poor over a period of 2005 to 2009.

## **Methodology:**

Data of the institutional delivery in 24 maternal hospitals were taken from Health Management Information System (HMIS) of the project. Descriptive analysis was undertaken to see the changes over the time. HMIS data quality is assured through regular monitoring with systematic approach.

## **Findings:**

Data from health management information system (HMIS) shows that only 2.09%, 1.85% and 5.07% of women who delivered at 10 UPHCP clinics in Dhaka were poor in the year of 2005, 2006 and 2007 respectively. The achievement was far lower than the mandatory target of 30%. UPHCP II

engaged HLSP for monitoring services of the partner NGOs in 2007 using specially designed tools called Integrated Supervisory Instruments. These tools measure performances of partner NGOs with a time interval using indicators including services to the poor. The HMIS data shows that there is a trend of increase of average delivery for the poor from about 5% in 2007 to 19.6% in 2008 and 28.75% in 2009. A similar trend of increase was observed in other city cooperation partnership areas also.

#### **Discussion:**

Pro-poor policy frame may not work alone. Regular monitoring with specific pro-poor indicators drive providers to reach maternal services to the poor.



## **Taking a stock of the problems ailing three High focus North Eastern States after five years of decentralised planning under NRHM**

*Author(s): Alivia Biswas, Sweta Roy*

#### **Introduction:**

The launch of National Rural Health Mission (2005 -2012) was recognition of importance of health in the process of socio economic development. The mission oriented approach was apt to address all components of functional systems, infrastructure, human resources, logistics and participation of the community through increment in public investment in healthcare and addressing managerial weaknesses in the system. Pre-NRHM the felt need was to bring the poorly performing states at par with the better performing ones and hence Empowered Action Group of eight states was constituted in 2001. Failure to achieve desirable improvement in health indicators, led the Mission to focus on 18 poorly performing states, which included eight North Eastern states of Assam, Meghalaya,



Tripura, Sikkim, Nagaland, Mizoram, Arunachal Pradesh and Sikkim.

Our consultancy organisation got an opportunity to be part of decentralised planning process of three high focus North Eastern states of Meghalaya (2006-2007), Tripura (2006-2007) and Sikkim (2007-2008) under NRHM. After five year's journey of NRHM in the above mentioned three states, this study aims at revisiting the situation in the light of the performance of the three states in three identified components of structural correction of the health system, as enlisted in findings.

### **Methodology:**

- Desk Review
- Primary data collection through structured questionnaire
- In depth Interviews of key functionaries

### **Findings:**

- Innovations in the human resource development of the health sector: Shortage of health manpower in the three states is a common excuse i.e., instrumental in explaining ineffective and inefficient health outputs. Tripura is yet to appoint ANMs in about 8.5% of SCs to make them functional. The placement of a second ANM is a mammoth challenge. Political unrest and inaccessible terrains of three states often add to the multitude of the problem. All 24 PHCs in Sikkim do not have Staff nurse and so is the situation in Meghalaya with only 13% of its PHCs having Staff nurse. Meghalaya has only 13% of its PHCs working 24\*7. The presence of the medical cadre is concentrated in and around semi urban and urban conglomerates since absence of overall development in the hills is yet to be addressed. The availability of clinical cadre is often official documentation. The demand of ASHAs for being included in the mainstream is adding to the issues to be resolved.

- Setting norms and standards and achieving service guarantees: IPHS was a milestone effort towards setting

public health standards but none of the facilities in the three states have achieved the norms. Up gradation of CHCs is facing serious hurdle to place clinical specialists. JSY scheme has enabled Meghalaya to achieve 10% increase in institutional deliveries, which is the highest among the three states but failed in assuring 48hrs of recommended stay in PHCs mainly due to unavailability of manpower, lack of electricity and related amenities. Mission has provided an impetus to utilisation but lack of concurrent development has affected the impression of the user negatively.

- Flexible financing: The expenditure pattern of three study states shows an interesting pattern of gradual increase till 2008-2009 with a fall in 2009-2010. The gradual increase in allocation and release with reduction in expenditure signifies inability of the states to spend the fund available. The utilisation of untied fund available with sub-centres and VHWSCs for community ownership, though increased from 2005 to 2010 the use is not optimal signified by inability to submit UCs.

### **Discussion:**

Removing the performance indicators pertaining to Assam from the NE conglomerate, bares the non-performance of other NE states. Similarly, allocations are skewed if Assam is seen in purview along with other NE states. The uniqueness and variety of North East States cannot fall into the "One size fit all" interventions and strategies. For e.g. appointment of ASHAs has led to resentment among skilled TBAs supporting home deliveries in hilly terrain and led to confusion in a successful service delivery mechanism. The norms of two ANMs at SCs, 24\*7 facilities and FRUs can be relaxed and stress can be given on creating an alternative health cadre by evidence based integration of local traditions and alternative medicine.



# **Assesment of Knowledge and Utilization of Untied Fund Provided to VHNSCs in Selected Villages of Five Sub Centre Area of PHC, Anji in Wardha District**

*Author(s): Keshri V. R., Raut A. V., Mehandale A. M., Garg B. S.*

## **Introduction:**

Village Health and Sanitation Committee is formed in each village of country under National Rural Health Mission to envisage the principle of primary health care for placing people's health in people's hand. In Maharashtra state, considering the high prevalence of malnutrition, nutrition component is also added and thus committee is called village health nutrition and sanitation committee. Untied fund of 10000 Rs. is provided to each VHNSC per year with some guidelines on how to utilize the fund. Very little is known about the knowledge of fund among the VHNSC members and actual utilization of fund.

Objective o this study was to assess the knowledge of VHNSC members about guidelines for utilization of untied fund and to assess the knowledge of VHNSC members regarding actual utilization of untied fund.

## **Methodology:**

A cross sectional study was done in 10 selected village of five sub centre area of PHC, Anji in Wardha district of Maharashtra which comes under the field practice area of Kasturba rural health training centre , Department of Community Medicine, Mahatma Gandhi Institute of Medical Sciences between 15 July to 15 august 2010. 2 villages from each of 5 sub centre area were selected with first village being sub centre headquarter and second village selected by lottery method. In each of the selected village 50% of the members were interviewed using semi structured, pre-designed, pre-tested questionnaire. In depth interview were conducted with the president and secretary of VHNSC. Quantitative data were analyzed



using EPI\_INFO (version 6.04d). Qualitative data were analyzed manually using qualitative qualifier.

### **Results:**

Mean age of the members are 37.7 years with 61.9% members being male. Agriculture is main occupation of the majority of the members (54.7%). Average family income of the members is 3700 Rs/month and majority (57.2%) of the members is educated up to 9th standard. 71.4% of the members had heard about NRHM. 85.7% members had ever attended meeting but 61.4% said no meeting was held during last three months. Regarding untied fund 85.7% of those who have ever attended meeting were aware about untied fund and 77.7% knew correct amount of untied fund. Only 41.6% had heard of guidelines for utilization of untied fund. Regarding use of fund during previous year 77.7% of the members were unaware about the area where the funds were utilized and 91.66% members said that either president or secretary decides about use of fund without consulting the members. Among President and secretary approximately ½ had heard of NRHM, some of them were aware about responsibilities of VHNSC. Majority among president and secretary were unaware about the guidelines for utilization of untied fund and most of the fund was utilized for supplementary diets to anganwadi children.

### **Discussion:**

Present study suggests that although untied fund is perceived to be good initiative but the VHNSC is not able to utilize the fund according to guideline. The understanding about guidelines among VHNSC members as well as presidents and secretaries is not adequate. Thus there is obvious need of training and continuous monitoring of VHNSC for achieving the objectives of setting of VHNSC in each village.



# The Role of Community Monitoring in improving accountability of the public health system

*Author(s): S. Ramanathan, Rajani R Ved, Renu Khanna*

## **Introduction:**

India's National Rural Health Mission, in operation since 2005, includes a component of communitization that envisioned active people's engagement through social mobilization by a woman community health worker, the ASHA, the establishment of a Village Health and Sanitation Committee (VHSC) to facilitate village level planning for health and access to a limited untied funds to meet local needs for improving health. Taken together these measures were intended to improve, inter alia accountability of the public health system. In 2007, the NRHM launched a community monitoring pilot initiative covering 324 PHCs in 36 districts in nine states, primarily through non-governmental organizations with oversight and technical inputs from a national advisory committee with government representation. This study reports on findings from an evaluation of pilot phase, conducted 18 months from the onset.

## **Methodology:**

The study combined a mix of methods: review of tools, formats and process documentation, review of report cards and findings from Jan Samwads (public hearings), focus group discussions and in-depth interviews. The study used a random sampling process to select 27 villages. Key stakeholders included members of the community/VHSC, providers in sub-centers and PHCs in the study area, staff of NGOs who participated in the process, district and state health officials and members of the state and national advisory committees. The study was conducted by a team of public health experts with experience in community health interventions.

**Findings:**

The 18 month period, almost half of which was spent in the development of rather complex tools and formats, resulted in some gains vis-à-vis community engagement. Public funding to ensure accountability in the health sector marks a major milestone in India's health programmes. Providers and community alike, although this varied across states, were made aware of their rights and responsibilities, resulting in improvements in service access and use. There was a genuine effort at involving the marginalized groups in the process of monitoring, which resulted in increased representation of such groups in committees and public hearings.

Researchers observed dilution of the strong ownership for the process at the national level at state and even more at district and block levels. The experience in the use of structured tools and ranking systems such as monitoring formats, report cards and conducting effective public meetings with health providers varied substantially with the competencies of the state nodal agency and the inputs provided to its grassroots staff. The complex nature of the tools, with little local adaptation were a limiting factor in true community involvement, sometimes resulting in an academic rather than dynamic and community led process. The purposive selection of NGOs and civil society groups with a strong activist focus to conduct the monitoring enabled the process.

**Discussion:**

States have taken (and some more tentatively than others) the first steps towards accountability namely, engagement and responsiveness. The success of community monitoring in holding the public health system accountable depends significantly on the local context particularly the governance situation as well as the state of readiness of health care facilities to be responsive to people's needs. Providing information to the people and providers is critical in ensuring that community monitoring results in accountability. The lack of linkages of



the community monitoring process with other elements of the communitization, or other levels of planning such as block or district planning. This limits the potential of the ASHA and front line service providers such as the ANM or AWW in active participation in the process. The intensity of the process although perceived as a deterrent for sustainability of the process by policy makers is a critical facilitating factor in the process. Sustainability of the community monitoring process relies on making it the first step towards community planning for health.



## Paper on planning process in Bihar

*Author(s): Ajit Singh, State Health Society, Bihar*

### **Background:**

NRHM proposes the decentralisation of planning processes so that the state plan is representative of the needs and priorities of respective blocks and districts. In Bihar, State Programme Implementation Plan (SPIP) 2010-11 has been framed on the basis of strategies and activities which worked in the last four years. The major bottlenecks have been identified and an attempt has been made to overcome them through alternative strategies. This paper describes in detail the processes and outcomes realized in achieving decentralized planning in Bihar.

### **Methodology:**

The State constituted Block and District Planning Committees for preparation of SPIP under NRHM and designated nodal officers at the district and block level for this task. District Planning Team (DPT) at the district level was constituted with ACOMO, DPM, DAM, one DPO, one MOIC, and one BHM. Two Intensive (seven days) capacity building workshops for the DPT has been held with the support of NHSRC and SPOs, in which the district planning in all its facets- Why, When, Where, and How has been dealt with. Furthermore, DPT was sensitizes on all

NRHM programmes. Block Planning Team was constituted by the MOIC, Block Health Manager and Block Accounts Manager. At the district level ACO is the Nodal Officer for planning while at the block level the MOIC and different DPOs have been designated as nodal officers per block in each district for the block planning exercise.

Resource envelop was communicated to the districts and the blocks based on the district and block fund allocation in previous year with an anticipated 25% increase from previous year's budget allocation and the financial guidelines/unit cost for each budget-head prepared by respective SPOs was communicated (covering aspects like purpose of the budget head, outcome, unit cost, responsible official, financial protocol etc).

Districts thereafter conducted capacity building workshops for the blocks and various consultative workshops both at the block and district level and done situational analysis and have drafted their district plans. At the block level, consultation was done and was further sent to the district. With the information gathered from the block, district further held consultations and prepared their priorities and requirements, which were reflected in the District Health Action Plans (DHAP). The DHAP was a consolidation of block health action plans (BHAP) and incorporation of district level requirements/priorities. The districts presented their plans before respective SHSB officials/SPOs at a State level workshop held in end of the December and based on the feedbacks received from SPOs, modified their plans and gave final shape to the same

The method of data collection was both primary and secondary in the preparation of the Plan. The secondary data were collected by reviewing records, registers and annual reports. The data were also collected from DLHS, SRS and NFHS surveys to support the background information. For primary data, the procedure involved focus group discussions, interactions and meetings in different districts. This was done to have opinion of all the

programme officers, health staff, grass root workers and private partners.

### Findings:

State health society Bihar, under the guidance of Principal Secretary, Health and Executive Director, SHSB has brought in a systemic change in the planning process and has incorporated the core concept of NRHM Mission Document i.e. Decentralisation of planning. The planning exercise for FY 2010-11 has been a multi-pronged process.

The State has undertaken Block and District Planning Exercise under which District Action Plans as per the NRHM guidelines have been prepared for 32 out of 38 districts, and for the rest this activity is expected to be completed by end of January 2010. The State Action Plan for 2010-2011 reflects the outcomes of the District Action Plans.

It is noteworthy that for the first time in Bihar NRHM block planning exercise has been undertaken along with all the 38 districts preparing their DHAPs with specific initiatives.

Proposed Specific Initiatives in DHAPs	Name of District
1. Free ambulance for pregnant women	Gaya
2. Blood donation camp	Gaya
3. Monthly VHND at Aganwadi centre.	Kishanganj, Nalanda and Nawada
4. Maternal death audit	Arwal, Bhagalpur, Buxar, Gaya, Jehanabad, Samastipur, Siwan, Vaishali and West Champaran.
5. Health camps through MMU in Mahadalit Tola (Vulnerable groups)	Banka, Begusarai, Bhagalpur, Kaimur and Kishanganj
6. MTP Training (Safe abortion Nurses/ ANM/MO)	Aaria, Arwal, Aurangabad, Darbhanga, East Champaran, Gaya, Gopalganj, Jamui, Jehanabad, Katihar, Khagaria, Kishanganj, Madhubani, Munger, Muzaffarpur, Nalanda, Nawada, Purnea, Rohtas, Samastipur, Sheohar, Siwan, Vaishali and West Champaran



The state has considered the requirement of the district thoroughly and provision has been made in the SPIP as per their need. The state plan is the consolidation of the requirements of the district plans received and the priorities of the State. The State level Programme Officers have chalked out their plans and requirements for FY 2010-11 which has also been consolidated into the State PIP and synchronized with district level requirements. The progress under various programmes has been analyzed to identify and prioritize the programme interventions. Moreover, systems development interventions have been incorporated to sustain the programme gains.

The SPIP and DHAPs consists of five major sections-

1. Reproductive & Child Health Programme-II
2. Additionalities under NRHM
3. Routine Immunization
4. National Disease Control Programmes
5. Inter Sectoral Convergence

The SPMU team was thoroughly involved in the process and their critical inputs were incorporated to make this plan more holistic, realistic and achievable. The plan was further reviewed by the Executive Director, SHSB and the CEO-cum-Secretary, Health, Dept. of Health, Govt. of Bihar.

#### **Discussion:**

After GOI approval is received on the Bihar SPIP 2010-11, the following steps shall be undertaken;

- District's Annual and Quarterly Fund Allocation for all Major and Minor heads will be communicated to the districts
- Uploading of GOI ROP, State Plan, District Plans, District Allocations and Financial Guidelines on SHSB website
- Flexibility will be given to Districts to re-allocate funds within the sub-heads of the Major sections in qtr. allocations, with the ceiling of annual target. Thus districts can prioritize their needs and meet them at the

district level.

- Block's Annual and Quarterly Fund Allocation finalised through District and Block consultation at a District level workshop (SHSB representation in wkp. for clarity of process and guidelines)
- State level officials to undertake Activity Planning exercise which covers the process indicators for each activity and time line for completion of the same.
- State level wkp. shall be held with Development Partners for ensuring their support in proper implementation at the district and block level and to ensure optimum fund utilisation at the district level.



## What next measles control for Karnataka India?

*Author(s): Raveesha M.R.*

### **Introduction:**

Worldwide, measles still kills 400 people every day, more than 90% of them being under-fives. Three out of four deaths happen in India, the only country that has not yet introduced a second dose of measles vaccine. India's progress in measles control is a major determining factor in global control of measles. Prevention of measles deaths is key to achieve millennium development goal 4; that is to reduce under-five mortality by two thirds by 2015. There is limited literature available on measles epidemiology in India. No measles surveillance was done before 2006. Built on an existing flaccid paralysis surveillance system, a measles surveillance programme was launched in four southern states of India in 2006, among them Karnataka. The objectives of my work are to describe the epidemiology of measles in Karnataka and to identify ways to improve measles control in the state.

### **Methodology:**

I collated and tabulated weekly surveillance reports and outbreak investigation line lists. I synthesized the spatio-temporal distribution of measles cases and outbreaks in the state. I reviewed the international literature on determinants of measles outbreaks. Through logistic regression multivariate analysis, I specified the contextual demographic and socio-cultural determinants of measles outbreaks and vaccination coverage in the state of Karnataka. I conducted an audit of surveillance against the standards of measles surveillance set by the country.

### **Findings:**

Measles surveillance data from 2006 to 2009 reveal that measles is indeed endemic in Karnataka, with frequent outbreaks. The notification rate of measles is 10.94 cases per 100,000 population per year. Seasonality of notified measles cases characteristically increases between November and April and decreases from May to October. There were 163 confirmed outbreaks in the state in the four years under study. Measles outbreaks were happening consistently in the northern part of the state and sporadically in the southern part: 22 out of 179 blocks (of which 21 in northern Karnataka) reported outbreaks every year. These were considered as high-risk blocks. Fifty one percent of measles-affected were under-fives; 38 percent were in the age group of five to nine years. In the age group one to four years, only 46% of the measles-affected had received a documented dose of measles vaccine. The vaccine efficacy in the high-risk blocks was between 80% and 90%. The duration of these outbreaks from the date of appearance of rash in a first case to last case was ranged from 7 days to 120 days with median of 39 (q1 15: q3 63) days. The total number of measles affected in each outbreak, among the 163 measles outbreaks ranged from 20 to 256 with a median of 38 (q1 25: q3 74) cases.

Bivariate analysis of Karnataka surveillance data reveals association of a block's probability to have an outbreak



with a number of variables: low vaccination coverage in the block, decadal population growth rate of the block, scheduled caste and tribe population, below poverty line population, agricultural occupation, poor housing conditions, low living index, and low literacy level. After multivariate analysis only the low vaccination coverage (below 84.9%) and decadal population growth rate (more than 19.6%) remained statistically significant as independent predictors of measles outbreaks in a block, with an odds ratio of 9.78 and 6.12 respectively.

According to the international literature, three major factors contribute to measles outbreaks: inadequate routine vaccination coverage, inadequate vaccine efficacy and situations in which there is an accumulation of unprotected population coming into direct contact with measles cases.

The surveillance programme in Karnataka complied with the standards of timely and complete reporting (both over 90%) since 2006. Out of 172 suspected outbreaks, 163 were serologically confirmed.

### **Discussion:**

Measles control being critical to reduce under-five mortality, action is needed. Refined understanding of measles epidemiology allows for appropriate action. In Karnataka, both an organisational and a geographical focus are needed: significant reduction in measles incidence and outbreaks can be attained only by adding a second dose to the routine vaccination scheme in the whole state and by conducting catch-up campaigns in northern Karnataka, home of socio-economical disadvantaged communities. Alongside these priority interventions, surveillance can be strengthened, and case management can be improved with more efficient vitamin A administration and inclusion of outbreak response immunisation.

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# **Health Financing**





# Patterns of Public Health Expenditure in India: Analysis of State and Central Health Budgets in pre and post-NRHM period

*Author(s): Gautam Chakraborty, Arun B. Nair*

## **Introduction:**

Improvement in human development indicators and reduction in inequalities and are clearly linked to economic and social priorities of the governments and also to the outlays in social sector infrastructure. In this context public health budgets become relevant because it is expected to mirror the priority of the governments in terms of financial allocation towards health sector. Looking at the significance of public health expenditure in achieving better health outcomes and reducing catastrophic health expenditure, the central and state governments in India have been increasing their expenditure on health, especially since 2005-06, coinciding with the launch of the National Rural Health Mission (NRHM).

The main objective of this analysis is to examine the size, distribution, trends, composition and rate of growth of Union and State Health Expenditure during the period of 2001-02 to 2008-09.

## **Methodology:**

The analysis focuses on twenty-eight state budgets and allocations at the all India level during the period of 2001-02 to 2008-09. The study uses "State Finances - A Study of Budgets" (2001-02 to 2009-10) published by Reserve Bank of India, as the principal data source for analyzing the state health budgets. For NRHM budget and expenditure figures, MIS for NRHM prepared by the Financial Management Group (FMG), was used. For simplicity of analysis the states are grouped into (a) High-Focus EAG States (b) High-Focus North Eastern States and (c) General Category States, based on the norms adopted under NRHM.

**Findings:**

The central government health budget increased by 21.5 per cent per year (compounded annually) in the post NRHM phase (2004-06 to 2008-09) as compared to 10.8 per cent per year in the pre-NRHM period (2001-02 to 2004-05). Looking at the health expenditures by three categories of states (High Focus, High Focus-NE, and Non-high focus) we find an increasing pattern among all states, especially since 2005-06. The overall growth rate of health expenditure (2001-02 to 2008-09) for all states was 12.8 per cent per year, which in the pre-NRHM period was 5.7 per cent per year; and in the post NRHM period 18.4 per cent per year. The overall growth rate for EAG states was 16.5 per cent, while for North East States it was 17.2 per cent and for General Category States it was 10.8 per cent per year. High Focus North Eastern States shows the maximum growth rate in the post NRHM period with 26.3 per cent, while High Focus EAG States recorded 22.5 per cent and General category states recorded 17.1 per cent growth (compounded annually).

Utilization trends of state health budgets were also done to understand the absorption levels of health expenditure. The revenue expenditure of state health budget for all states increased marginally from 91.4 per cent in 2001-02 to 93.8 per cent in 2004-05; and in the post NRHM period it declined marginally to 92.1 per cent by 2007-08. On the other hand significant change was noticed in the utilization of capital expenditure for all states, which increased from 40.7 per cent in 2001-02 to 90.3 per cent in 2004-05 and to 95.1 per cent in 2007-08 (expenditure as percentage of budget allocated).

Analysis of NRHM funding which is an off budget transaction (society route) was primarily done for two flexi pools of RCH-II and NRHM Flexi pools from 2005-06 to 2008-09. Although both the Flexi pools show increasing expenditure from 2005-06 to 2008-09, utilization rates of RCH Flexi pool is more compared to NRHM Flexi Pool. The utilization rate of RCH Flexi pool increased from 28.1 per

cent in 2005-06 to 95.5 per cent in 2008-09, whereas NRHM flexi pool utilization showed a humble beginning from 4.3 per cent in 2005-06 but increased rapidly to 139.9 per cent by 2008-09.

### **Discussion:**

It seems that the post-NRHM phase not only witnessed a positive shift in according greater priority to health sector in terms of increased financial commitments by both central and state government, but also an increase in absorptive capacity of funds, which is an encouraging trend.



## **District fund flow under NRHM and service delivery: Some insights from Karnataka**

*Author(s): K. Gayithri, Emmannuel Thomas*

### **Introduction:**

National Rural Health Mission (NRHM) launched in 2005 seeks to provide quality healthcare services, especially to the rural poor and marginalized groups with special focus on the backward districts. NRHM aims at increasing the public spending on health from 0.9% GDP to 2-3% of GDP by 2012, with improved arrangement for community financing and risk pooling.

The increased allocations are expected to resolve the fund shortage issues however; the extent of increase and the sources of such funding need to be assessed for their adequacy and relevance for further policy initiatives. Program Implementation plan (PIP) is a pioneering initiative seeking to link the funding requirements to local needs; the extent to which the health care financing is reflecting these needs and the fulfillment of the current felt needs has to be verified at the grass root level for future policy refinements. A study of district level funds flow and



expenditure and service delivery is taken up for two districts of Karnataka- Gulbarga and Chitradurga, preliminary findings of this study form the basis for the present paper. The main objective of the study is to develop a comprehensive picture of resource flows (comprising of NRHM and Treasury routes; external if existing), its composition in terms of salary and non-salary and program components; timing of the releases and their utilization at the district level.

### **Methodology:**

The study has selected two districts for a comprehensive study of fund flows- Gulbarga to represent a very backward district and Chitradurga a moderate district in terms of health indicators but receiving a fair amount of funding support under NRHM. Study has selected a few facilities representing the district, taluk, CHC, PHC and Sub Center levels for the purpose of the study of fund flows. State level data has been collected from the NRHM cell and the facility data has been procured from the records of the facilities selected for the purpose.

### **Findings:**

Funding support to Gulbarga in absolute and relative terms is justifiably larger for Gulbarga reflecting its backwardness. However, in per capita terms which are a true reflection of per head benefit, Chitradurga a less needy state (in comparison with Gulbarga) gets a higher benefit. Gulbarga's allocation moved up from Rs 7 Crore in 2007-08 to Rs 12.62 crore in 2009-10, an increase by about eighty percent over two years. However, expenditure falls short of allocation by thirty percent in 2008-09. Further utilisation has dropped in 2008-09 to 70 percent as against 90 percent in 2007-08. This is a clear contradiction where in larger funding support provided to address the health sector inadequacies remain unspent.

Bunching of expenditure towards the close of the financial year has caused serious service delivery issues. Field study reveals that funds under NRHM additionalities do not

reach the hospitals on time. Instances such as funds allocated for the financial year 2009-10 reaching the district in the month of January 2010 were observed. In addition, officers concerned at the grass root level lacked clarity as to what were the main expenditure components of the untied grant (these funds come under the three heads of annual maintenance grant, Arogya Raksha Samithi and untied funds) - many accounts officers (unknowingly) call the untied funds as UNITED funds.

In addition, fund utilisation is deviating in a significant manner from the guidelines. How well the untied grants get utilised needs a closer examination- at times annual untied grants are accumulated for three years to be spent in one go- instances of purchase of Television sets and DVD players. By no stretch of imagination, one could classify this as patient health care service.

Jananai Suraksha Yajane (JSY) Prasooti Araiike and Madilu are schemes that are meant to encourage institutional deliveries with an objective to reduce the maternal and infant mortality instances. Beneficiary mothers are receiving these benefits much after delivery defeating the very objective of the schemes. Ironically while on the one hand there are unspent balances under the NRHM program, coexistent are non/delayed payments for certain schemes.

### **Discussion:**

The research reveals while the issue of fund shortage was rightly addressed by enhancing resource support; the absorptive capacity at the grass root level is not strengthened. PIPs and the resource support are not going in tandem, thus defeating the very purpose of need based health care financing. There appears to be considerable amount of ambiguity and fear at the facility level to use the untied funds resulting in accumulation of the same for two to three years. This indicates the need for further capacity building.



# Conditional cash transfers and quality of maternal and newborn care: Women's experiences of Janani Suraksha Yojana in Rajasthan, India

*Author(s): K G Santhya, Shireen J. Jejeebhoy, Rajib Acharya and A.J. Francis Xavier*

## **Introduction:**

Given high levels of maternal mortality and limited institutional delivery in India, the Janani Suraksha Yojana (JSY) was launched to provide financial incentives for institutional delivery. Evaluations thus far suggest that institutional deliveries have increased, but provide little insight into whether access to and quality of services have improved or whether JSY has reached the most vulnerable. The paper examines the extent to which JSY benefits were received by the most vulnerable groups and the extent to which the quality of maternal and newborn care received improved or compromised with the introduction of JSY.

## **Methodology:**

A cross-sectional study, comprising a survey and in-depth interviews, was conducted among women aged below 35 years who had delivered in the one year preceding the interview in rural and urban areas of Alwar and Jodhpur districts of Rajasthan during September 2009-February 2010. A total of 4,770 women were successfully interviewed during the survey; 48 surveyed women were interviewed in-depth as well.

Two analysis approaches were used to assess the effects of JSY on the quality of maternal and newborn care. The first approach used cross-sectional data and compared experiences during the most recent birth of a matched sample of JSY beneficiaries and non-beneficiaries. The matched sample was selected using the technique of propensity score matching; a total of 3,434 beneficiaries and non-beneficiaries thus selected constituted the sub-



sample used for the cross-sectional analyses. Mean values of outcome variables obtained for beneficiary and non-beneficiary groups were then compared to assess the extent to which quality of maternal and newborn care differed between the two groups.

The second approach used panel data generated from a sub-sample of women who had experienced both pre-and post-JSY births. Based on information related to whether or not they had availed of JSY cash assistance for the most recent birth, women were then categorised into beneficiaries and non-beneficiaries. As with the cross-sectional sample, JSY beneficiaries in the sub-sample were explicitly matched with individuals in the non-beneficiary group using the technique of propensity score matching; a total of 1,264 beneficiaries and non-beneficiaries thus selected constituted the sub-sample used for the panel analyses. To assess the net effect of JSY on the quality of maternal and newborn care, we used the difference-in-difference (DiD) estimation that contrasted the difference in outcome indicators in the beneficiary group before and after the introduction of JSY with the difference in outcome indicators in the non-beneficiary group before and after the introduction of JSY.

Regression models were estimated to assess the net effect of JSY after controlling for potentially confounding factors.

### **Findings:**

Although all women in the state were eligible, fewer than half had received the cash (46%). A slightly larger proportion of urban than rural women reported that they had received the cash (52% versus 45%). Findings, moreover, suggest that the reach of the JSY remains inequitable; the most vulnerable – young adolescent women, women belonging to socially excluded classes, less educated and those belonging to economically poor households – were less likely than others have received the benefits.

Evidence on the quality of maternal and newborn care presents a mixed picture. Findings indicate that there has been some improvement in the quality of antenatal services, for example, the provision of information related to pregnancy care and comprehensive services to women seeking antenatal services, with the introduction of JSY. In the area of delivery and postpartum care, findings show that although cross-sectional comparisons indicated that beneficiaries were less likely than non-beneficiaries to have received quality delivery and postpartum services, panel comparisons suggest that quality of delivery and postpartum services had neither improved nor compromised over time and hence, the differences between the two groups observed for the most recent birth cannot be attributed to the introduction of JSY. In the area of newborn care, findings suggest that JSY had contributed to significant increase in the adoption of best practices related to immediate care of the newborn.

#### **Discussion:**

While JSY has contributed to increased institutional delivery, questions remain in terms of quality of care and access of the most vulnerable to services, concerns that require programmatic attention as demand for services is enhanced.

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## **A Study to analyse implementation of RSBY in Chhattisgarh**

*Authors: Sulakshana Nandi, Kanica Kanungo, Md. Hashim Khan,  
Haripriya Soibam, Tarang Mishra, Samir Garg*

#### **Introduction:**

The Rashtriya Swasthya Bima Yojana (RSBY) was launched in 2008 to provide insurance cover to below poverty line (BPL) households from major health shocks that involve hospitalization. In Chhattisgarh RSBY was launched in June 2009 and Durg was the first district to be enrolled.

The present study attempts to analyse implementation of RSBY and bring out gaps in implementation. It also attempts to explore whether out of pocket expenses is still incurred by patients utilizing this insurance.

### **Methodology:**

Data was collected through primary and secondary sources. Primary data was collected through interviews of people who had utilized RSBY in May and June 2010. Secondary data was collected from RSBY website.

The district with highest utilization rate in Chhattisgarh, Durg was selected. In Durg hospital wise data was sought from the district regarding utilisation. Data showed that only two Public hospitals (District Hospital and Gunderdehi) had undertaken hospitalisations, therefore these were included in the sample. Out of the Private Hospitals, hospitals in Durg and Bhilai towns were selected through convenience sampling. Finally two public hospitals (out of 16 empanelled) and five private hospitals (out of 10 empanelled) were selected for the study. The researchers spent four days at each hospital and attempted exit interviews of 10 cases per hospital, but finally the sample per hospital varied, due to non-cooperation by some of the hospitals. In CHC Gunderdehi, in June (when data was collected), the RSBY facility was closed for most of the period. Hence in order to complete the sample, the researchers identified the villages with highest number of hospitalisations and in the village traced beneficiaries through Mitans (ASHA).

A structured questionnaire was used to conduct exit interviews of patients at the facility and of beneficiaries in the village. This questionnaire was pilot tested on 5 patients.

A total of 100 beneficiaries were interviewed which comes to 4% of total hospitalised cases in Durg district and 2% of total hospitalised cases in Chhattisgarh (both till 30th April 10).



**Findings:**

In Chhattisgarh 46% of the eligible families were enrolled till July 2010 and the hospitalisation rate was only 2 per 1000 persons enrolled. The claims ratio is low with only Rs. 6.4 crore paid as claims so far, whereas insurance companies received an annual premium of Rs. 75 crore. The average value of hospitalisations in Chhattisgarh is Rs 4411.

Primary survey shows that only 4% of recipients actually received their smart card on the spot. People were hardly given any information on RSBY. More people from rural areas and from SC/ST community were accessing public sector hospitals and 40% of these patients had been referred by Mitandin (ASHA). In terms of symptoms which brought people to the health facility, 33% of the respondents had complains of weakness, 18% fever, 13% surgery and 10% complained of abdominal pain.

For people who were aware of the amount deducted, the average value of hospitalisation in public sector was Rs 4988 while in private sector it was Rs. 7416.

58% of the respondents in private sector and 17% in public sector incurred out-of-pocket expenses. Average out-of-pocket expenditure in the private sector was Rs 1078 and in public sector it was Rs 309. Most private hospitals also kept a BPL quota, beyond which they refuse to admit patients under RSBY.

**Discussion:**

RSBY is meant for the poorest and aims to relieve them of the burden of health care costs. However, the study found that patients still incurred out of pocket expenses. Also, most private hospitals did not admit RSBY patients beyond their BPL quota though the patient could pay and get treatment at the same hospital.

A lack of transparency is evident from the enrollment process to the facility level where a large number of persons were not aware of the amounts deducted from

their cards. There is need for more transparency and proactive disclosure about the details of patients for a more comprehensive analysis.

Unless the public health delivery system is strengthened and the private sector is regulated, this scheme will not yield desired results, instead cost of healthcare will further escalate for the poor. There needs to be more debate on the implementation and the design of RSBY.

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## **A Rapid Evaluation of the Rajiv Aarogyasri Community Health Insurance Scheme-Andhra Pradesh**

*Author(s): Mala Rao, Shridhar Kadam, Sathyanarayana T.N., Rahul Shidhaye, Rajan Shukla, Srikrishna Sulgodu Ramachandra, Souvik Bandyopadhyay, Anil Chandran, Anitha C.T., Sitamma M, Mathew Sunil George, Vivek Singh, Subhashini Sivasankaran, Veena Shatrugna*

### **Introduction:**

The Rajiv Aarogyasri Community Health Insurance scheme (RAS) was established with the aim of breaking a vicious cycle of ill health, poverty, indebtedness and bankruptcy among the families living below the poverty line (BPL) in Andhra Pradesh in the year 2007. The purpose of the scheme was to improve access of BPL families to treatment of identified medical and surgical conditions through a network of health care providers. Indian Institute of Public Health (IIPH), Hyderabad did a rapid evaluation of Rajiv Aarogyasri Community Health Insurance Scheme at the request of government of Andhra Pradesh. The purpose of the evaluation was to provide insights into the current performance of the scheme, to examine whether it is meeting the overall objectives and to suggest ways by which it may be further strengthened.

### **Methodology:**

For the evaluation, two types of data were used. Patient data were obtained from the Aarogyasri Healthcare Trust.

A total of 1,05,712 treatments had been authorised from 1/04/07 to 30/09/08. The analyses included 89,699 treatments undertaken for 71,549 beneficiaries excluding 16013 treatments for which data was not complete. Secondly, surveys were conducted by teams in 6 randomly selected districts of AP. 217 beneficiaries from 18 mandals of 6 districts were interviewed visiting their homes. Further, 9 Andhra Pradesh Vaidya Vidhan Parishad (APVVP) hospitals, 4 government teaching hospitals and 14 private hospitals were visited. In addition, one PHC from each mandal was visited. Information was also collected through semi structured interviews of all the stakeholders including State government, Aarogyasri Health Care Trust, Star Health Insurance Company and beneficiaries as well.

### **Findings:**

There were 111 beneficiaries per lakh BPL population who had utilised the scheme until the end of September 2008. Scheduled Castes (SCs) and Scheduled Tribes (STs) beneficiaries were significantly lower than their proportions in the population in the majority of the districts. Cardiac, cancer and neurological interventions made up 65% of all treatments administered by the scheme. Of the 353 participating hospitals, 30 hospitals located in six cities of AP had undertaken more than 50% of all interventions. It was also observed that with increasing distance to these major cities, the utilization rate of the scheme declined. The beneficiary satisfaction survey elicited the highest scores for doctors, nurses and cleanliness. The lowest scores were for health camps and information provided about the scheme. Nearly 60% beneficiaries incurred a median of Rs. 3600 out of pocket expenditure with transport, medicine and pre-diagnostic investigations being the major reasons. Thirteen percent of beneficiaries had no follow up visit and 28% had only one follow up visit.

### **Discussion:**

The evaluation has revealed that there is scope for the



scheme to improve strategic purchasing, quality of care, integration, continuous audit and inbuilt evaluation. The evaluation has emphasized on developing more coherent, cohesive and integrated health system with convergence of preventive, promotive and curative services taking into account the wider determinants of health. The evaluation has also suggested for in-depth studies of different features of the scheme.



## **Effective Utilization of National Rural Health Mission Flexi-Funds in Jharkhand: Facilitators, Barriers and Options**

*Author(s): Suranjeen P, Sapna Surendran, Tapan Chakraborty, Supriya Minz, Avinash Ansingkar, Arti Bhanot, Rajan Kumar*

### **Introduction:**

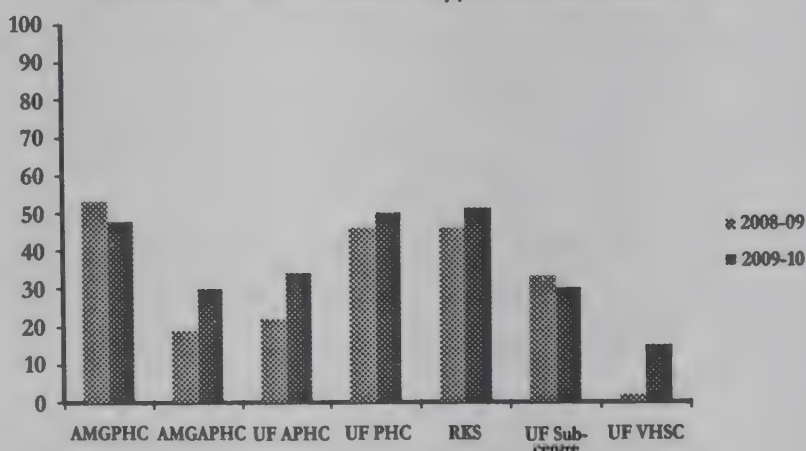
The Flexi-funds under NRHM provide a solution for paying for urgent but discreet expenses pertaining to maintenance of health infrastructure and provision of services at district, block and village level. Decisions on use of these funds are proposed to be made locally through District Health Societies (DHS), Rogi Kalyan Samitis (RKS), Panchayati Raj Institutions (PRIs), Village Health and Sanitation Committees (VHSC) and village level health and Integrated Child Development Services (ICDS) workers at district, block and village level respectively. There are different policy documents and guidelines that relate to use of flexi-funds. These funds are meant to ensure that institutions at all levels for health care, including the Village Health Committee (VHC), has readily available funds to meet expenses for any bottlenecks that arise in the provision of public health service delivery. The service providers and the communities are empowered with decision-making powers for a small, yet significant amount of funds placed directly with them. The proposed allocation of flexi-funds at various levels of health care delivery is presented in table

Table 1: Proposed allocation of flexi-funds at various levels of health care (per annum)

S.No.	Level	United Funds (INR)	Annual Maintenance Grant (INR)	RKS (INR)
1.	District			5,00,000
2.	Block(CHC)	50,000	1,00,000	1,00,000
3.	Block(PHC)	25,000	50,000	1,00,000
4.	Village (Sub-Centre)	10,000	10,000	NA
5.	Village(VHSC)	10,000	NA	NA

The problem of underutilization of all types of flexi-funds has persisted in the state. Based on financial monitoring reports available at the State Program Management Unit (SPMU) in Jharkhand, the utilization of AMG at PHC/CHC level has hovered around 50% in 2008-09 and 2009-10. However, use of untied fund at sub-centre level has been about 30% during the same years. Utilization of untied fund at VHC level has witnessed is still excruciatingly low. Figure 1 provides the percentage of flexi-funds utilized in Jharkhand between the years 2008 and 2010.

Figure 1: NRHM flexi-funds utilization in Jharkhand between 2008 and 2010 for different types for flexi-funds (%)



This study was undertaken with the following objectives:

1. To identify barriers impeding utilization and practices promoting utilization of the NRHM flexi-funds at district and sub-district level through primary and secondary research.
2. To make recommendations to the Government of Jharkhand (GoJ) for improved utilization of flexi-funds.
3. To develop revised operational guidelines on use of flexible funds for approval by the Government of Jharkhand.

**Methodology:**

The Problem Solving Approach was used understanding the underutilization issues in Jharkhand

**Findings:****1. General Findings:**

- a. Late release of funds
- b. Unclear operational guidelines for fund utilization at all levels
- c. Lack of clarity on decision-making processes
- d. Fund monitoring and supervision mechanisms not well understood
- e. No provision for orientation and training of fund managers
- f. Audit system not well-established

**2. Fund Specific Findings:**

Level	Type of fund	Barriers
District & block	RKS	- Formation and registration of district level societies - Lack of clarity for technical and management Units
Block	AMG	Lack of clarity on accountability and role of various managers in fund utilization
Village (sub_center)	AMG  United funds	- Operational Guideline does not exist at all - ANM/ AWW are new and first-time fund managers Guidelines have specific items prescribed for utilization, (against the principle of United funds)
Village (VNC)	United funds	- Delayed Formation and registration of VHC - Absence of PRI in state - AWW, Sahhiyas and VHC members are first-time fund managers

**Discussion:****1. Lessons Learnt:**

- Government should be an equal partner to ensure complete buy-in for necessary course correction of revised program.
- Any revision of program guideline/ implementation steps should be followed up to assess the appropriateness and effectiveness of revisions.
- Despite political and socio-economic variations across the country, there is tremendous scope for adapting existing best practices from other states.



## 2. Policy Implications:

- Revision of existing guidelines to make them user-friendly and comprehensive for fund managers and users.
- Capacity building of fund managers.
- Strengthen Monitoring and Evaluation systems.
- Integrate Community Monitoring framework or other external accountability mechanisms.

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## Performance of Community health insurance in India – findings from empirical studies

*Author(s): N Devadasan, Bart Criel, Wim Van Damme, Patrick Van der Stuyft*

### Introduction:

Health care in India is provided by a mixture of government and private providers. While the government health services are ostensibly free, in reality, studies have shown that people do have to pay for medicines and diagnostics and procedures. People approaching the private sector usually end up making out-of-pocket payments (OOP). This has two effects, one it can be a substantial and inequitable barrier to accessing health services. And among those who access these services, patients can become impoverished.

Health insurance is considered as a protective measure against the harmful effects of OOP. Most of the people in India (and especially the poor) are not covered by health insurance. However, there is a growing movement of community health insurance (CHI) in India, which covers the poorer sections of the Indian community. However, there is very little evidence that these CHI are able to improve equitable access quality health care and prevent impoverishment. The objective of this document is to present the findings of a study to look into this issue.

**Methodology:**

We initially made a list of all the CHI programmes in the country and then selected only those, which provided hospital care. Of these we randomly selected 10 schemes and visited them to document their model. As most of these schemes did not have data on performance, we purposively sampled three of the above 10 schemes (ACCORD, SEWA and KKVS) and conducted a cross sectional survey among the insured and uninsured populations. We interviewed a total of 1400 families and measured variables related to access to hospital care in the past one year, health expenditure among the patients who used hospital care and finally the satisfaction levels. We also collected relevant and available secondary data. Associations were measured using 95% confidence interval as well as multiple regressions.

**Findings:**

From our initial survey, we found that all CHI schemes in the country were organized by NGOs. The schemes can be divided into 3 broad models – a provider model where the NGO is the organizer, the insurer and the provider of care; an insurer model where the NGO is the organizer and insurer, but purchases care from private hospitals; and finally the agent model where the NGO is just the organizer and purchases insurance from insurance companies and care from private hospitals.

We found that at ACCORD the utilization of hospital care was 2.2 times higher among insured compared to the uninsured. Insurance was one of the main reasons for this increased access, even after regression.

At ACCORD and SEWA we found that the insurance status was helpful in reducing the OOP payment for the insured. The incidence of catastrophic health expenditure was halved in both the schemes among the insured as compared to the uninsured and this difference was statistically significant. However, in both the schemes, insured patients still had to pay some amount as co-

payments.

Patient satisfaction among insured at ACCORD and KKVS were higher in both the schemes but the difference was statistically different only at KKVS.

### **Discussion:**

Our study clearly demonstrates that a well-designed CHI programme in India is able to increase the access to health care and reduce OOP payments. However, to strengthen it further, CHI schemes need to ensure minimal administrative load for subscribers and patients, increase the benefit package and actively purchase health care from providers.

Policy level implications are there for the currently introduced RSBY and other schemes in terms of organization of the scheme, the purchasing of care and monitoring, not just the financial aspects but also the health aspects of the scheme.

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## **Janani Suraksha Yojana in Jharkhand: Determinants of utilization of conditional cash transfer scheme and institutional delivery**

*Author(s): Manoja Das, Sarita Singh, Lalitendu Jagatdev, Sanjay Rai,  
Narendra K. Arora*

### **Introduction:**

With Janani Suraksha Yojana (JSY), institutional delivery in Jharkhand has increased fourfold over 3 years. Despite the increase, JSY in Jharkhand has reached only to half of the expected deliveries and less than 1/3rd of the deliveries are happening at government hospitals. What are the factors influencing institutional delivery and how service delivery has changed with JSY in Jharkhand? This study was undertaken to address client and program managers perspectives on utilisation of JSY scheme in Jharkhand.



## **Methodology:**

This cross-sectional study covering six districts used qualitative research methods; in-depth interview, key informant interviews with mothers who delivered in last one year (at hospitals and at home), program managers, health functionaries and community members. Focus group discussions were done with husband, mother-in-law and father-in-laws. Data collected during May-July 2009 included 405 interviews (including 144 hospital delivered mothers-HoDMs and 144 home delivered mothers-HDMs) and 24 focus group discussions. Multilevel quality assurance measures were put in place to ensure high quality data collection and data entry. Data was analysed manually and semi-quantitative qualifiers (few=<1+; some=1+; half=2+; majority=3+; most=4+ and almost all=5+) used for expression.

## **Findings:**

Socio-demographic characteristics for mothers from both categories were comparable. Most of the mothers from both categories had at least one ANC, mostly at AWC. Majority of the HoDMs had birth planning, while some of the HDMs did same. Mobilisation by health workers for ANC and birth planning assistance were negligible and service delivery was lacking for weighing, checking for pallor, abdomen, blood pressure, advice on danger signs during ANC.

Some of the HoDMs were accompanied by Sahiyas to hospitals. Most HoDMs returned home within 24 hours of delivery. Reasons mentioned by mothers for leaving early were: no perceived problem, lack of adequate facility and care, being comfortable at home, and anticipated higher expenses, while doctors expressed request for discharge as the key reason. Majority of the HoDMs were not counseled for breastfeeding, danger signs and birth spacing before discharge.

Half of the mothers received PNC visits, many only once by Sahiyas. Services during PNC missed asking for fever,

bleeding, breastfeeding, advice on birth spacing and danger signs and weighing of babies.

Half of the HoDMs and majority of the HDMs did not receive money. Difficulties faced by mothers were delay in payment, repeated visits, documents, asking for bribe, partial payment, bad behavior and bank related issues.

Most of the mothers perceived the purpose of money was for better nutrition of mother, medicines, transportation and spent accordingly. Half of the HoDMs spent higher (>Rs1000) compared to the HDMs (<Rs500), due to transportation, purchasing medicines and payment to staffs.

Most health functionaries opined money as key for increased hospital delivery. But, most of HoDMs and community members expressed availability functional birthing facility near home and accessibility as key factors apart from money. The major reasons for home delivery were poor accessibility, cost, fear of surgery and injections, lack of trust, awareness and unexpected events. Majority of health officials feared drop in hospital deliveries with cash incentive withdrawal, but majority of the health workers and community members felt that it can be sustained with functional birthing facilities.

### **Discussion:**

It appears that sustaining institutional delivery requires functional health facilities with reach of people with required services. Proactive involvement of private facilities is needed where possible. In view of increased delivery load and health system's capacity, risk categorization and appropriate period of stay for mothers after delivery should be considered. For minimum essential service delivery by health functionaries at different stages and levels, adequate empowerment, support and monitoring is needed. ANC package must include birth planning to encourage hospital delivery. For areas with higher home deliveries, involving dais for

mobilizing mothers for hospital delivery against incentive may be explored. Strategic communication efforts must address improving awareness and clear the concerns and misinformation about hospital delivery.













## Acknowledgement

We would like to thank the following people for their help in developing and publishing this abstract book.

Abraham Joseph  
Bart Criel  
Fabienne Richard  
Muralidhar Kalachar  
Nehal Jain  
Prashanth N.S.  
Rajani Ved  
Sylvia Karpagam  
Tom Hoeree  
Upendra Bhojani  
Valeria Campos Da Silveira  
Vidya Venkataraman  
Vijayashree H.Y.  
Werner Soors  
Wim Van Damme



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Email: [mail@iphindia.org](mailto:mail@iphindia.org)